CITY OF NEWTON PURCHASING DEPARTMENT

CONTRACT FOR PUBLIC WORKS (M.G.L. Ch. 30, Sec. 39M)

PROJECT MANUAL: 2016 CITYWIDE MICRO-SURFACING OF ROADWAYS INVITATION FOR BID #16-110

Bid Opening Date: July 7, 2016 at 11:00 a.m.

JUNE 2016 Setti D. Warren, Mayor

CITY OF NEWTON

PURCHASING DEPARTMENT

INVITATION FOR BID #16-110

The City of Newton invites sealed bids in accordance with M.G.L. c.30, §39M from Contractors for:

2016 CITYWIDE MICRO-SURFACING OF ROADWAYS

Bids will be received until: 11:00 a.m., Thursday, July 7, 2016

at the Purchasing Department, Room 201, Newton City Hall, 1000 Commonwealth Avenue, Newton, MA 02459. Bids will not be accepted nor may submitted bids be corrected, modified or withdrawn after the deadline for bids. Immediately following the deadline for bids, all bids received within the time specified will be publicly opened and read aloud.

Work under this contract includes the cleaning, general preparation and crack-sealing of the targeted roadway surfaces, and for the subsequent application of approximately thirty thousand (30,000) square yards of Type III density microsurfacing material which is to be applied in two (2) courses to yield a final total thickness of one-half (1/2) inches in depth. The Contractor is further advised that this work will involve extensive traffic control measures.

Contract Documents will be available online at www.newtonma.gov/bids or for pick up at the Purchasing Department after 10:00 a.m., June 23, 2016.

There is no charge for Contract Documents.

Only contractors qualified by the Massachusetts Department of Transportation (MassDOT) are eligible to bid. MassDOT has provided a list of Prequalified Construction Contractors to the City of Newton. Bidders will be verified at time of Bid Opening.

All bids must be accompanied by a bid deposit in an amount that is not less than five percent (5%) of the value of the bid, <u>including</u> all add alternates. Bid deposits, payable to the City of Newton, shall be either in the form of a bid bond, or cash, or a certified check, or a treasurer's or cashier's check issued by a responsible bank or trust company. Bidders are reminded that the bid deposit covers the City for damages when a bidder withdraws its bid after the bid submisssion date. **Be advised that to the extent permitted by the law the City will retain all bid deposits for withdrawn bids.**

All Bids must be submitted with one Original and one Copy.

The City of Newton will award the contract to the lowest eligible and responsible bidder. Please Note: this bid, in accordance with the Chapter 303 Acts of 2008, contains Price Adjustments and new Prevailing Wage requirements. All bidders are required to familiarize themselves with these terms and conditions before submitting a bid.

Time is of the Essence for this project. Anticipated start date is July 18, 2016. Time for completion is ninety (90) calendar days from the Notice To Proceed. The successful bidder must be able to accommodate the City of Newton in the scheduling of this work.

All bids are subject to the provisions of M.G.L. Chapter 30, Section 39M. Wages are subject to minimum wage rates determined by the Massachusetts Department of Labor and Industries pursuant to M.G.L. Chapter 149, Sec. 26 to 27H. The schedule of wage rates applicable to this contract is included in the bidding documents. In addition, the prevailing wage schedule will be updated annually for all public construction projects lasting longer than one (1) year. You will be required to pay the rates set out in any updated prevailing wage schedule. Increases in prevailing wage schedules will not be the basis for change order requests. The successful bidder will be required to provide a Certificate of Insurance demonstrating current coverage of the type and amounts set forth in the Project Manual. The successful bidder will be required to furnish a Labor and Materials Payment Bond in the amount of 50% of the contract total. Wages are paid to drivers for all "on-site" work.

The City may reject any and all proposals in accordance with applicable law. In addition, the City reserves the right to waive minor informalities in any or all bids, or to reject any or all proposals (in whole or in part) if it be in the public interest to do so.

In the event that any person wishes to attend a bid opening or pre-bid meeting, accessible and reasonable accommodations will be provided to persons requiring assistance. If you need a reasonable accommodation, please contact the city of Newton's ADA Coordinator, Jini Fairley, at least two business days in advance of the meeting: jfairley@newtonma.gov or (617) 796-1253. For Telecommunications Relay Service, please dial 711.

CITY OF NEWTON

Nicholas Read

Chief Procurement Officer

June 23, 2016

CITY OF NEWTON

DEPARTMENT OF PURCHASING

INSTRUCTIONS TO BIDDERS

ARTICLE 1 - BIDDER'S REPRESENTATION

- 1.1 Each General Bidder (hereinafter called the "Bidder") by making a bid (hereinafter called "bid") represents that:
 - 1. The Bidder has read and understands the Bidding Documents, Contract Forms, General Conditions, Conditions of the Contract, General Requirements and Project Specifications (collectively, referred to as the "Contract Documents") and the bid is made in accordance therewith.
 - 2. The Bidder has visited the work sites and is familiar with the local conditions under which the work has to be performed.
- 1.2 Failure to so examine the Contract Documents and work sites will not relieve any Bidder from any obligation under the bid as submitted.

ARTICLE 2 - REQUEST FOR INTERPRETATION

- 2.1 Bidders shall promptly notify the City of any ambiguity, inconsistency, or error which they may discover upon examination of the Contract Documents, the site, and local conditions.
- 2.2 Bidders requiring clarification or interpretation of the Contract Documents shall make a written request to the *Chief Procurement Officer*, at purchasing@newtonma.gov or via facsimile (617) 796-1227. The City will only answer such requests if received by **Friday, July 1, 2016 at 12:00 noon**. In the event that the bid opening date is changed, the deadline for informational requests may also change as provided in an addendum issued by the City.
- 2.3 Interpretation, correction, or change in the Contract Documents will be made by addendum which will become part of the Contract Documents. The City will not be held accountable for any oral communication.
- Addenda will be emailed to every individual or firm on record as having taken a set of Contract Documents. Addenda will be emailed to every individual or firm on record as having taken a set of Contract Documents. Receipt of all addenda issued must be acknowledged in the Bid Form. YOUR FAILURE TO ACKNOWLEDGE ALL ADDENDA MAY RESULT IN YOUR BID BEING REJECTED AS NON-RESPONSIVE.
- 2.5 Copies of addenda will be made available for inspection at the location listed in the Invitation for Bids where Contract Documents are on file, in addition to being available online at www.newtonma.gov/bids.
- 2.6 Bidders or proposers contacting ANY CITY EMPLOYEE regarding an Invitation for Bid (IFB) or a Request for Proposal (RFP), outside of the Purchasing Department, once an IFB or RFP has been released, may be disqualified from the procurement process.
- Bidders downloading information off the internet web site are solely responsible for obtaining any addenda prior to the bid opening. If the bidder makes itself known to the Purchasing Department, at purchasing@newtonma.gov or via facsimile (617) 796-1227, it shall be placed on the bidder's list. Bidders must provide the Purchasing Department with their company's name, street address, city, state, zip, phone, fax, email address and INVITATION FOR BID #16-110.

ARTICLE 3 - MBE PARTICIPATION

- 3.1 Notice is hereby given that the Mayor's Affirmative Action Plan for the City of Newton in effect at the time of this solicitation is applicable to all construction contracts in excess of \$10,000.00.
- 3.2 Notice is hereby given that the City of Newton Minority/Women Business Enterprise Plan and the Supplemental Equal Employment Opportunity Anti-Discrimination and Affirmative Action Program in effect at the time of this solicitation are applicable to all City contracts for goods and services in excess of \$50,000.00.
- 3.3 Copies of the Plans and Program referred to in Sections 3.1 and 3.2 are available at: www.newtonma.gov/purchasing.

ARTICLE 4 - PREPARATION AND SUBMISSION OF BIDS

- 4.1 Bids shall be submitted on the "Bid Form" as appropriate, furnished by the City.
- 4.2 All entries on the Bid Form shall be made by typewriter or in ink.
- 4.3 Where so indicated on the Bid Form, sums shall be expressed in both words and figures. Where there is a discrepancy between the bid sum expressed in words and the bid sum expressed in figures, the words shall control.
- 4.4 Bid Deposits shall be submitted in the amount specified in the Invitation for Bids. They shall be made payable to the City and shall be either in the form of cash, certified check, treasurer's or cashier's check issued by a responsible bank or trust company, or a bid bond issued by a surety licensed to do business in the Commonwealth of Massachusetts; and shall be conditioned upon the faithful performance by the principal of the agreements contained in the bid. Bidders are reminded that the bid deposit covers the City for damages when a bidder withdraws its bid after the bid submisssion date. Be advised that to the extent permitted by the law the City will retain all bid deposits for withdrawn bids.

Bid deposits of the three (3) lowest responsible and eligible Bidders shall be retained until the execution and delivery of the City-Contractor agreement.

- 4.5 The Bid, including the bid deposit shall be enclosed in a sealed envelope with the following plainly marked on the outside:
 - * GENERAL BID FOR: **#16-110**
 - * NAME OF PROJECT: 2016 Citywide Micro-Surfacing of Roadways
 - * BIDDER'S NAME, BUSINESS ADDRESS, AND PHONE NUMBER
- 4.6 Date and time for receipt of bids is set forth in the Invitation for Bids (IFB).
- 4.7 Timely delivery of a bid at the location designated shall be the full responsibility of the Bidder. In the event that Newton City Hall is closed on the date or at the time that bids are due, the date and time for receipt of bids shall be on the next business day following that the Newton City Hall and the Purchasing Department are open.
- 4.8 Bids shall be submitted with one **original** and one **copy.**
- 4.9 Be advised that a new Massachusetts law has been enacted that required all employees who work on Massachusetts public works construction sites must have no less than 10 hours of OSHA-approved safety and health training. See Chapter 306 of the Acts of 2004, which became effective July 1, 2006.
 - 1. This requirement will apply to any general bid or sub bid submitted.
 - 2. This law directs the Massachusetts Attorney General to restrain the award of construction contracts to any contractor who is in violation to this requirement and to restrain the performance of these contracts by non-complying contractors.
 - 3. The contractor and all subcontractors on this project will be required to provide certification of compliance with this requirement. Non-compliance with this law will disqualify you from bidding on public contracts.

4.10 PRICE ADJUSTMENT CLAUSES CHAPTER 90 FUNDS

It is the intention of the City to include price adjustments in the award of this Contract. These price adjustments shall be for 1) Fuel and 2) Liquid Asphalt when such commodities have been determined to be integral components of the work.

For those commodities designated to be paid as a 'differential' items then the special provision shall provide for a price adjustment formula for the affected items. This adjustment shall be based on the difference between the **Base Price** and the **Period Price** which shall be evaluated on a **monthly** basis, but price adjustments shall only be made if the monthly cost change exceeds +/- 5 per cent. Subsequently each respective price adjustment shall be made as specified under each applicable and separate payment item.

IMPORTANT NOTE: Depending on the prevailing market trends at the time of payment these price adjustments may provide for additional compensation to the Contractor, or they may otherwise result in a repayment to the City. The increase or a decrease in the value of the commodity, during the applicable payment period in which the goods and/or services were rendered, shall be the determinant factor.

The City will refer to the Massachusetts Highway Department price adjustment tables as included in this bid package to establish the base price and will be used for the actual period price.

Price Adjustment Clauses – to apply as follows:

- Diesel and Gasoline (Items 0.303FC-CRS, 0.303FC-MS, & 0.303FC-CP) The Base Price, and the Period Price of fuel, shall be the derived average cost of Diesel Fuel and Gasoline Fuel combined for each applicable payment period. Fuel adjustments shall apply to all work in the contract. The Contractor, at their own election, may either choose to bid their fuel costs separately, or he may otherwise elect to incorporate their fuel costs into separate payment items. In any event the Contractor's final bid prices shall include the fuel costs for all goods & services rendered under this contract. There are separate fuel adjustment formulas for Crack Sealing, Micro-Surfacing and Cold Planing.
- **Liquid Asphalt (Item 0.303LA)** Price adjustments for Liquid Asphalt shall be made in accordance with Special Provisions §0.303 at pp. 87-88 below.

No price adjustment will be allowed beyond the completion date of the contract unless there is an approved extension of time by the City.

ARTICLE 5 - ALTERNATES

- 5.1 Each Bidder shall acknowledge alternates (if any) in Section C on the Bid Form.
- In the event an alternate does not involve a change in the amount of the base bid, the Bidder shall so indicated by writing "No Change", or "N/C" or "0" in the space provided for that alternate.
- 5.3 Bidders shall enter on the Bid Form a single amount for each alternate which shall consist of the amount for work performed by the Contractor.
- 5.4 The low Bidder will be determined on the basis of the sum of the base bid and the accepted alternates.

ARTICLE 6 - WITHDRAWAL OF BIDS

- Any bid may be withdrawn prior to the time designated for receipt of bids on written or electronic request. Electronic withdrawal of bids must be confirmed over the Bidder's signature by written notice postmarked on or before the date and time set for receipt of bids.
- 6.2 Withdrawn bids may be resubmitted up to the time designated for the receipt of bids.
- 6.3 No bids may be withdrawn within sixty (60) days, Saturdays, Sundays and legal holidays excluded, after the opening of the bids.

ARTICLE 7 - CONTRACT AWARD

- 7.1 The City is soliciting prices for items set forth in the Item Sheets, attached hereto at pp. 73-79 below. It is the City's intent to award one (1) contract to the responsible and eligible bidder submitting the lowest Total Bid Price. A contract will be awarded within sixty (60) days, Saturdays, Sundays, and legal holidays excluded, after the opening of bids.
- 7.2 The City reserves the right to waive minor informalities in or to reject any or all Bids if it be in the public interest to do so.
- 7.3 The City reserves the right to reject any bidder who has failed to pay any local taxes, fees, assessments, betterments, or any other municipal charge, unless the bidder has a pending abatement application or has entered into a payment agreement with the collector-treasurer.
- As used herein, the term "lowest responsible and eligible Bidder" shall mean the Bidder (1) whose bid is the lowest of those bidders possessing the skill, ability and integrity necessary for the faithful performance of the work; (2) who has met all the requirements of the invitation for bids; (3) who shall certify that he is able to furnish labor that can work in harmony with all other elements of labor employed or to be employed in the work; (4) who, where the provisions of section eight B of chapter twenty-nine apply, shall have been determined to be qualified thereunder.

- 7.5 Subsequent to the award and within five (5) days, Saturday, Sundays and legal holidays excluded, after the prescribed forms are presented for signature, the successful Bidder shall execute and deliver to the City a contract in the form included in the Contract Documents in such number of counterparts as the City may require.
- 7.6 In the event that the City receives low bids in identical amount from two or more responsive and responsible Bidders, the City shall select the successful Bidder by a blind selection process chosen by the City such as flipping a coin or drawing names from a hat. The low Bidders who are under consideration will be invited to attend and observe the selection process.

ARTICLE 8 - TAXES

- 8.1 The Bidder shall not include in this bid any tax imposed upon the sale or rental of tangible personal property in this Commonwealth, such as any and all building materials, supplies, services and equipment required to complete the work.
- 8.2 The City is exempt from payment of the Massachusetts Sales Tax, and the Bidder shall not include any sales tax on its bid. The City's exemption Number is E-046-001-404.

ARTICLE 9 – PROPRIETARY SPECIFICATIONS

- 9.1 The City has used a proprietary specification to describe the supply listed in the specifications. Such specifications are permitted under M.G.L. c. 30, §39M(b), provided that the City states in writing that use of the proprietary specification is in its best interest and that it will accept an "equal" of the item specified. An item is considered equal if (i) it is at least equal in quality, durability, appearance, strength, and design; (ii) will perform the intended function at least equally; and (iii) conforms substantially, even with deviations, to the detailed requirements contained in the specifications. In the event that the Bidder wishes to substitute an equal item, it may do so either in its bid or proposal or after the contract is awarded but before a contract is executed, it being understood that the award shall be conditioned on the Bidder providing the item originally specified or an equal item accepted by the City and identified in the contract. In no event shall the Bidder be entitled to offer, or the City obliged to consider, the substitution of an item as equal after execution of a contract. In the event the Bidder substitutes or attempts to substitute an "equal" item after that date, it shall be in breach thereof and be liable for actual and consequential damages resulting from its failure to perform as agreed. The City shall have the sole right to determine whether or not said item is equal.
- 9.2 The required determination and justification have been duly prepared, and a copy may be requested in accordance with the Massachusetts Public Records Law, M.G.L. c. 66, §10.

ARTICLE 10 – ENVIRONMENTALLY PREFERABLE PRODUCTS

- 10.1 The City encourages environmentally preferable products, i.e., products or services that have less negative or more positive effects on human health and the environment when compared with competing products or services that serve the same purpose. The city encourages bidders to describe, in the space provided on the Bid Form, the environmental attributes of its goods or services throughout the entire life-cycle, including manufacture, use and disposition. This information may include multiple environmental considerations such as natural resource use, recycled content, energy and water efficiency, greenhouse gas emissions, impact on climate change, packaging, hazardous material use, and health and safety impacts on workers, consumers and the community. If you do not currently assess such attributes, please indicate that. However you respond, the City will not take your information into account in evaluating bid proposals.
- 10.2 Bidders are encouraged also to provide information related to steps they take internally to (a) identify any positive or negative environmental attributes of products or services they offer, as specified above, and (b) insure that those attributes are being addressed as part of operations.

END OF SECTION

CITY OF NEWTON

DEPARTMENT OF PURCHASING

BID FORM #16-110

A. The undersigned proposes to supply and deliver the materials specified below in full accordance with the Contract Documents and Project Manual supplied by the City of Newton entitled:

2016 CITYWIDE MICRO-SURFACING OF ROADWAYS

for the contract price specified below, subject to additions and deduction according to the terms of the specifications. There is no separate labor charge under this bid: unit prices shall include full compensation for all labor, materials, tools and equipment, and all incidentals necessary to complete the work as specified herein.

В.	This	bid includes addenda number(s),,,
C.	The	proposed Total Bid Price is:
	(The	DOLLARS (\$). In figure inserted above shall be the Total Bid Price as computed on the Item Sheets, pp. 73-79, attached hereto.)
	CC	DMPANY NAME:
D.	Th	ne undersigned has completed and submits herewith the following documents:
	o	Bidder's Qualifications and References Form, 2 pages
	O	Certificate of Non-Collusion, 1 page
	O	Debarment Letter, 1 page
	O	IRS Form W-9, 1 page
	o	Signed Bid Form, 3 pages
	o	Item Sheets, 7 pages
	o	A five percent (5%) bid deposit.
E.	may	npt Payment Discounts. Bidders are encouraged to offer discounts in exchange for an expedited payment. Payments be issued earlier than the general goal of within 30 days of receipt of the invoice only when in exchange for ounted prices. Discounts will not be considered in determining the lowest responsible bidder.
		npt Payment DiscountDays
	Pron Pron	npt Payment Discount
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¹ The bid is based on estimated quantities, which are the City's best estimate based on prior experience. Actual quantities may be more or less than those estimated. Regardless of the amount of the actual quantities, the unit price(s) shall be that set forth in the Bidder's Item Sheets.

F. The undersigned agrees that, if selected as general contractor, s/he will within five days, Saturdays, Sundays and legal holidays excluded, after presentation thereof by the City of Newton, execute a contract in accordance with the terms of this bid **and furnish a Payment bond** of a surety company qualified to do business under the laws of the commonwealth and satisfactory to the City of Newton in the **sum not less than 50% of the contract price**, the premiums for which are to be paid by the contractor and are included in the contract price.

The undersigned hereby certifies that s/he is able to furnish labor that can work in harmony with all other elements of labor employed or to be employed on the work and that s/he will comply fully with all laws and regulations applicable to awards made subject to section forty-four A of M.G.L. Chapter 30, s 39M.

The undersigned certifies that he is able to furnish labor that can work in harmony with all other elements of labor employed or to be employed in the work; (2) that all employees to be employed at the worksite will have successfully completed a course in construction safety and health approved by the United States Occupational Safety and Health Administration ("OSHA") that is at least 10 hours in duration at the time the employee begins work and who shall furnish documentation of successful completion of said course with the first certified payroll report for each employee; and (3) that all employees to be employed in the work subject to this bid have successfully completed a course in construction safety and health approved by the United States OSHA that is at least 10 hours in duration. The undersigned understands that any employee found on a worksite subject to this section without documentation of successful completion of a course in construction safety and health approved by the United States Occupational Safety and Health Administration that is at least 10 hours in duration shall be subject to immediate removal.

The undersigned further certifies under the penalties of perjury that this bid is in all respects bona fide, fair and made without collusion or fraud with any other person. As used in this subsection the word "person" shall mean any natural person, joint venture, partnership, corporation or other business or legal entity. The undersigned further certifies under penalty of perjury that the said undersigned is not presently debarred from doing public construction work in the Commonwealth under the provisions of section twenty-nine F of chapter twenty-nine, or any other applicable debarment provisions of any other chapter of the General Laws or any rule or regulation promulgated thereunder.

The undersigned further certifies under the penalties of perjury that they have familiarized themselves with the changes to the Prevailing Wage Rates, Price Adjustment Clauses, in accordance to Chapter 303 Acts of 2008.

G. Environmentally preferable products information (which is requested but which will not be considered in awarding a contract):

Description of environmental attributes of Bidder's goods or services:

Steps taken to (a) identify any positive or negative environmental attributes of products or services and (b) insure that

those attributes are being addressed as part of operations:

Date	
	(Name of General Bidder)
	BY:
	(Printed Name and Title of Signatory)
	(Business Address)
	(City, State Zip)
	(Telephone) (FAX)
	(E-mail address)

NOTE: If the bidder is a corporation, indicate state of incorporation under signature, and affix corporate seal; if a partnership, give full names and residential addresses of all partners; if an individual, give residential address if different from business address; and, if operating as a d/b/a give full legal identity. Attach additional pages as necessary.

END OF SECTION

CITY OF NEWTON

BIDDER'S QUALIFICATIONS AND REFERENCES FORM

All questions must be answered, and the data given must be clear and comprehensive. Please type or print legibly. If necessary, add additional sheet for starred items. This information will be utilized by the City for purposes of determining bidder responsiveness and responsibility with regard to the requirements and specifications of the Contract.

INCORI ORATED: TES	NO DATE AND S	TATE OF INC	ORPORATION:	
S YOUR BUSINESS A MBE?	YESNO WBE ?	YES	NO or MWBE ?	YES
JIST ALL CONTRACTS CURR DATE OFCOMPLETION:	RENTLY ON HAND, SHO	OWING CONT	TRACT AMOUNT A	ND A1
HAVE YOU EVER FAILED TO C YES NO	COMPLETE A CONTRACT	T AWARDED T	TO YOU?	
IF YES, WHERE AND WHY?				
HAVE YOU EVER DEFAULTED F YES, PROVIDE DETAILS.	O ON A CONTRACT?	YES	_ NO	
LIST YOUR VEHICLES/EQUIPM	MENT AVAILABLE FOR T	HIS CONTRA	CT:	
N THE SPACES FOLLOWING, I FIRM SIMILAR IN NATURE TO BE LISTED. PUBLICLY BID CO	O THE PROJECT BEING E	BID. A MINIM	IUM OF FOUR (4) C	
PROJECT NAME:				

NO
TELEPHONE #:)
TO PROJECT?:
(i.e., contract manager, purchasing agent, etc.)
DATE COMPLETED:
NO
TELEPHONE #: ()
TO PROJECT?:
(i.e., contract manager, purchasing agent, etc.)
DATE COMPLETED:
NO
TELEPHONE #: ()
TO PROJECT?:
(i.e., contract manager, purchasing agent, etc.)
DATE COMPLETED:
NO
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TO PROJECT?:
(i.e., contract manager, purchasing agent, etc.)

END OF SECTION

10.

CERTIFICATE OF NON-COLLUSION

submitted in good faith and without collusion or fraud	hat this bid or proposal has been made and submitted in good faith and d with any other person. As used in this certification, the word "person" shall tration, union, committee club, or other organization, entity, or group or
	(Signature of individual)
	Name of Business

City of Newton



Mayor Setti D. Warren

Purchasing Department

Nicholas Read & Chief Procurement Officer 1000 Commonwealth Avenue Newton Centre, MA 02459-1449 purchasing@newtonma.gov Telephone (617) 796-1220 Fax: (617) 796-1227 TDD/TTY (617) 796-1089

Date		
Vendor		

Re: Debarment Letter for Invitation For Bid #16-110

As a potential vendor on the above contract, the City requires that you provide a debarment/suspension certification indicating that you are in compliance with the below Federal Executive Order. Certification can be done by completing and signing this form.

Debarment:

Federal Executive Order (E.O.) 12549 "Debarment and Suspension" requires that all contractors receiving individual awards, using federal funds, and all sub-recipients certify that the organization and its principals are not debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded by any Federal department or agency from doing business with the Federal Government.

I hereby certify under pains and penalties of perjury that neither I nor any principal(s) of the Company identified below is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any federal department or agency.

		(Name)
		(Company)
		(Address)
PHONEEMAIL	FAX	(Address)
		Signature
		Date

If you have questions, please contact Nicholas Read, Chief Procurement Officer at (617) 796-1220.

(Rev. October 2007) Department of the Treasury Internal Revenue Service

Request for Taxpayer **Identification Number and Certification**

Give form to the requester. Do not send to the IRS.

22	Name (as shown on your income tax return)			
on page	Business name, if different from above			
Print or type Specific Instructions or	Check appropriate box: ☐ Individual/Sole proprietor ☐ Corporation ☐ Partnership ☐ Limited liability company. Enter the tax classification (D=disregarded entity, C=corporation, P=partne ☐ Other (see instructions)	rship) ►	X Exempt payee	
Print c Insti	Address (number, street, and apt. or suite no.)	quester's name and a	address (optional)	
Specifi	City, state, and ZIP code			
See	List account number(s) here (optional)			
Par	Taxpayer Identification Number (TIN)			
backu	your TIN in the appropriate box. The TIN provided must match the name given on Line 1 to a up withholding. For individuals, this is your social security number (SSN). However, for a reside sole proprietor, or disregarded entity, see the Part I instructions on page 3. For other entities,	ent	rity number	
	employer identification number (EIN). If you do not have a number, see <i>How to get a TIN</i> on page		or	
	. If the account is in more than one name, see the chart on page 4 for guidelines on whose er to enter.	Employer id	dentification number	
Dar	t II Cortification			

Under penalties of perjury, I certify that:

- 1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me), and
- 2. I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding, and
- 3. I am a U.S. citizen or other U.S. person (defined below).

Certification Instructions. You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the Certification, but you must provide your correct TIN. See the instructions on page 4.

Sign Signature of Here U.S. person ▶ Date ▶

Cat. No. 10231X

General Instructions

Section references are to the Internal Revenue Code unless otherwise noted.

Purpose of Form

A person who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) to report, for example, income paid to you, real estate transactions, mortgage interest you paid, acquisition or abandonment of secured property, cancellation of debt, or contributions you made to an IRA.

Use Form W-9 only if you are a U.S. person (including a resident alien), to provide your correct TIN to the person requesting it (the requester) and, when applicable, to:

- 1. Certify that the TIN you are giving is correct (or you are waiting for a number to be issued),
 - 2. Certify that you are not subject to backup withholding, or
- Claim exemption from backup withholding if you are a U.S. exempt payee. If applicable, you are also certifying that as a U.S. person, your allocable share of any partnership income from a U.S. trade or business is not subject to the withholding tax on foreign partners' share of effectively connected income

Note. If a requester gives you a form other than Form W-9 to request your TIN, you must use the requester's form if it is substantially similar to this Form W-9.

Definition of a U.S. person. For federal tax purposes, you are considered a U.S. person if you are:

- An individual who is a U.S. citizen or U.S. resident alien,
- A partnership, corporation, company, or association created or organized in the United States or under the laws of the United
- An estate (other than a foreign estate), or
- · A domestic trust (as defined in Regulations section 301.7701-7).

Special rules for partnerships. Partnerships that conduct a trade or business in the United States are generally required to pay a withholding tax on any foreign partners' share of income from such business. Further, in certain cases where a Form W-9 has not been received, a partnership is required to presume that a partner is a foreign person, and pay the withholding tax.
Therefore, if you are a U.S. person that is a partner in a partnership conducting a trade or business in the United States, provide Form W-9 to the partnership to establish your U.S. status and avoid withholding on your share of partnership

The person who gives Form W-9 to the partnership for purposes of establishing its U.S. status and avoiding withholding on its allocable share of net income from the partnership conducting a trade or business in the United States is in the following cases

. The U.S. owner of a disregarded entity and not the entity,

Form W-9 (Rev. 10-2007)

CITY - CONTRACTOR AGREEMENT

CONTRACT NO. C -

NEWTON, a r	MENT made this day of in the year Two Thousand and Sixteen by and between the CITY OF nunicipal corporation organized and existing under the laws of the Commonwealth of Massachusetts, hereinafter he CITY, acting through its Chief Procurement Officer, but without personal liability to him, and hereinafter referre ΓRACTOR.
The parties her	reto for the considerations hereinafter set forth agree as follows:
ARTICLE 1.	STATEMENT OF WORK. The Contractor shall furnish all labor, materials, and equipment and perform all work required in strict accordance with the Contract Documents for the following project:
	2016 CITYWIDE MICRO-SURFACING OF ROADWAYS
ARTICLE 2.	TIME OF COMPLETION. The Contractor shall commence work under this Contract on the date specified in the written notice of the City to proceed and shall fully complete all work hereunder within the time specified in the Summary of Work (90 Calendar Days) and Specific Work Requirements of the Project Manual. Time is of the essence with regard to this contract. Failure to complete within the time specified shall be subject to the assessment of liquidated damages in accordance with the provisions contained in the Project Manual.
ARTICLE 3.	THE CONTRACT PRICE. The City shall pay the Contractor for the full and satisfactory performance of the Contract, in current funds a sum not to exceed:
	\$
ARTICLE 4.	CONTRACT DOCUMENTS. The Contract Documents consist of the following documents which are either attached to this Agreement or are incorporated herein by reference:
a	. This CITY-CONTRACTOR Agreement;
b	. The City's Invitation For Bid #16-110 issued by the Purchasing Department;
c	The Project Manual for: 2016 Citywide Micro-Surfacing of Roadways including the Instructions to Bidders; General Conditions; Special Conditions; MWBE/AA Requirements, Wage Rate Requirements and Wage Rate Schedule(s) including any updated prevailing wage rate schedules if applicable; Price Adjustments; The Supplementary Special Conditions; General Requirements and Project Specifications; and Drawings, if included or referenced therein.
d	. Addenda Number(s);
e	. The Bid Response of the CONTRACTOR submitted for this Project and accompanying documents and certifications;
f	Certificate(s) of Insurance and surety bond(s), if any, submitted by the CONTRACTOR in connection with this Project;

of this CITY-CONTRACTOR Agreement.

Duly authorized and executed Amendments, Change Orders or Work Orders issued by the CITY after execution

This CITY-CONTRACTOR Agreement, together with the other documents enumerated in this Article, constitute the entire Agreement between the CITY and the CONTRACTOR. The CONTRACTOR represents that its bid was made without condition, qualification or reservation of any kind, except upon the written acknowledgement and consent of the CTIY.

ARTICLE 5.	ALTERNATES. The following Alternates stated in Article 3 of this Agreement:	have been accepted and their costs are included in the Contract Price	e
	Alternates: N/A		
ARTICLE 6.	APPLICABLE STATUTES. All applic herein by reference and the Contractor agree	able federal, state and local laws and regulations are incorporate es to comply with same.	ed
IN WITNESS V	WHEREOF, the parties have caused this instru	ment to be executed under seal the day and year first above written.	
CONT	FRACTOR	CITY OF NEWTON	
Ву		By Chief Procurement Officer	
Print N	Name	Chief Procurement Officer	
		Date	
Title _		Bv	
Date_		Commissioner of Public Works	
		Date	
	Affix Corporate Seal Here		
	unds in the amount of		
are ava	ailable in account number:	Ammoved as to Local Forms and	
01401	05A-52409	Approved as to Legal Form and Character	
	er certify that the Mayor, or his	D	
	nee, is authorized to execute contracts oprove change orders	By Associate City Solicitor	
Bv			
<i>y</i>	Comptroller of Accounts	Date	
Date_		CONTRACT AND BONDS APPROVED	
		By	
		By Mayor <i>or his designee</i>	
		Date	

CERTIFICATE OF AUTHORITY - CORPORATE

1.	I hereby certify that I am the Clerk/Secretary of
	I hereby certify that I am the Clerk/Secretary of (insert full name of Corporation)
2.	corporation, and that
	corporation, and that (insert the name of officer who signed the <u>contract and bonds</u> .)
3.	is the duly elected (insert the title of the officer in line 2)
	(insert the title of the officer in line 2)
4.	of said corporation, and that on
	(insert a date that is <i>ON OR BEFORE</i> the date the
	officer signed the <u>contract and bonds</u> .)
	at a duly authorized meeting of the Board of Directors of said corporation, at which all the directors were present or waived notice, it was voted that
5.	the (insert name from line 2) (insert title from line 3)
	(insert title from line 3)
	of this corporation be and hereby is authorized to execute contracts and bonds in the name and on behalf of said corporation, and affix its Corporate Seal thereto, and such execution of any contract of obligation in this corporation's name and on its behalf, with or without the Corporate Seal, shall be valid and binding upon this corporation; and that the above vote has not been amended or rescinded and remains in full force and effect as of the date set forth below.
6.	ATTEST: AFFIX CORPORATE
0.	ATTEST: AFFIX CORPORATE (Signature of Clerk or Secretary)* SEAL HERE
7.	Name:
	(Please print or type name in line 6)*
8.	Date:
	(insert a date that is <i>ON OR AFTER</i> the date the officer signed the <u>contract and bonds</u> .)

^{*} The name and signature inserted in lines 6 & 7 must be that of the Clerk or Secretary of the corporation.

CERTIFICATION OF TAX COMPLIANCE

Pursuant to M.G.L. c.62C, §49A and requirements of the City, the undersigned acting on behalf of the Contractor certifies under the penalties of perjury that the Contractor is in compliance with all laws of the Commonwealth relating to taxes including payment of all local taxes, fees, assessments, betterments and any other local or municipal charges (unless the Contractor has a pending abatement application or has entered into a payment agreement with the entity to which such charges were owed), reporting of employees and contractors, and withholding and remitting child support.*

Signature of Individual (Mandatory)	* Contractor's Social Security Number (Voluntary) or Federal Identification Number
Print Name:	Date:
OR	
Company Name (Corporation, Partnership, LLC, etc.)	
By:**Corporate Officer (Mandatory)	
Print Name:	
Date:	

^{*} The provision in this Certification relating to child support applies only when the Contractor is an individual.

^{**} Approval of a contract or other agreement will not be granted until the City receives a signed copy of this Certification.

^{***} Your social security number may be furnished to the Massachusetts Department of Revenue to determine whether you have met tax filing or tax payment obligations. Providers who fail to correct their non-filing or delinquency will not have a contract or other agreement issued, renewed, or extended.

CITY OF NEWTON, MASSACHUSETTS

PAYMENT BOND

Know All Men By These Presents: That we, _______, as PRINCIPAL, and ______, as SURETY, are held and firmly bound unto the City of Newton as Obligee, in the sum of _____ (\$______) to be paid to the Obligee, for which payments well and truly to be made, we bind ourselves, our respective heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents. Whereas, the said PRINCIPAL has made a contract with the Obligee, bearing the date of ______, 2016 for the construction of ______ in Newton, Massachusetts. (Project Title) Now, the conditions of this obligation are such that if the PRINCIPAL and all Sub-contractors under said contract shall pay for all labor performed or furnished and for all materials used or employed in said contract and in any and all duly authorized modifications, alterations, extensions of time, changes or additions to said contract that may hereafter be made, notice to the SURETY of such modifications, alterations, extensions of time, changes or additions being hereby waived, the foregoing to include any other purposes or items set out in, and to be subject to, provisions of M.G.L. c. 30, sec. 39A, and M.G.L. c. 149 sec. 29, as amended, then this obligation shall become null and void; otherwise it shall remain in full force, virtue and effect. In Witness Whereof, the PRINCIPAL and SURETY have hereto set their hands and seals this day of 2016. **PRINCIPAL SURETY** (SEAL) (ATTORNEY-IN-FACT) (SEAL) (Title)

ATTEST:

ATTEST:

CITY OF NEWTON

GENERAL CONDITIONS OF THE CONTRACT FOR PUBLIC WORKS CONSTRUCTION

ARTICLE 1

Definitions

The word "Commissioner" shall mean the official duly authorized to act for the City of Newton in the execution of the work of this contract, acting directly or through properly authorized agents.

The word "Engineer," or "City Engineer," shall mean the City Engineer of the City of Newton, acting directly or through properly authorized agents, such agents acting within the scope of the particular duties entrusted to them.

The word "Contractor" shall mean the party or parties contracting to perform the work covered by this contract or his, or their, legal representatives, successors or assigns.

The word "Plans" shall mean plans, and all related drawings, diagrams, profiles and specifications referred to and included in the Project Manual for this contract.

The word "City" shall mean the City of Newton.

The word "Project" shall mean the services which are the subject of the Contract Documents.

The words "Subcontracto" and Subcontractor" shall refer to project contracts between the Contractor and a subcontractor, and the subcontractor thereunder.

The term "Substantial Completion" shall mean either that the work required by the contract has been completed except for the work having a contract price of less than one per cent of the then adjusted contract price, or substantially all of the work has been completed and opened to public use except for minor incomplete or unsatisfactory work items that do not materially impair the usefulness of the work required by the contract.

ARTICLE 2 Plans, Drawings, Profiles

1. The work shall be done in accordance with Plans referred to in Article 1 and such further working and detail plans, drawings and profiles as may be furnished from time to time by the Engineer. All said plans, general and detail, are to be deemed a part of this contract, and the said Plans, specifications and contract are to be considered together, so that any work mentioned in the contract, though not shown on the Plans, and any work shown on the Plans though not mentioned in the contract, is to be provided by the Contractor as a part of this contract. Figured dimensions are to prevail over scale. All things which in the opinion of the Engineer may fairly be inferred from the contract, Plans and specifications, are to be executed by the Contractor as a part of the contract; and the Engineer shall be sole judge as to whether detail plans, drawings and profiles conform to the Plans and the contract.

Discrepancy in Plans

2.The Contractor shall carefully examine all said Plans, profiles, drawings, specifications and orders; all figures, dimensions, lines, marks and scales thereof, and all directions of the Commissioner and the Engineer relating to the work, and conform to those in relation to which there is no doubt or discrepancy, but at once submit all cases of doubt or discrepancy to the Engineer for adjustment. Anything done on any part of the work for which special information or drawing should be procured, unless done in accordance with such information or drawing, or anything done in relation to which there is doubt or discrepancy, except in accordance with the adjustment thereof, or done in violation of law or public authority, is to be redone if the Commissioner shall so direct.

ARTICLE 3 Inspection

The Contractor in carrying on the contract shall conform to all determinations and directions of the Engineer relating to the proper interpretation of the Plans, , the fitness of persons employed on the work or the number thereof, or the suitableness, amount, quality, and value of anything done or any materials used, and the Contractor shall permit the Commissioner and/or the Engineer and/or persons designated by them to enter upon the work and inspect the same at all times and in all places, and shall provide safe and convenient facilities for making such entry and inspection.

ARTICLE 4 Change in Plans and Work

The City, acting through the Commissioner and upon his written order only, from time to time given to the Contractor or his foreman, may change, increase or take away any part of the work, or change the specifications, Plans, drawings, form or materials thereof. Any deduction or addition thereto is to be allowed, or paid for at a price to be determined, within not more than 15 days of the completion of the change, by the City Engineer acting in the same capacity as an architect in a building contract as between City and Contractor. Any demand for addition or deduction must be made in writing to the City Engineer within seven (7) days of the time change was ordered.

ARTICLE 5 Time and Manner of Doing the Work

- 1. The Contractor shall begin work upon receipt of written Notice to Proceed. Once begun the work shall be carried out in a continuous and uninterrupted fashion with sufficient workforce and resources to assure completion by the date for completion established by the Contract Documents.
- 2. The Contractor shall carry on the work in accordance with the requirements of law and of all other public authorities, and to the satisfaction of the Commissioner; he shall give all notices, take out all permits, pay all charges and fees, give personal supervision to the work and keep thereon a competent foreman and sufficient employees, skilled in the several parts which are given them to do.

Maintenance of Travel

3. As applicable, the Contractor shall conduct his work so as to interfere as little as possible with public travel, and shall give property owners proper means of access to their property where existing access has been cut off by the work. The Contractor shall keep the streets open for through travel except where, in the opinion of the Commissioner, it is necessary to close the street. The continuous length of the street occupied for the work shall be kept as short as possible, and no part of the work shall be unnecessarily delayed. Wherever the Commissioner shall direct, trenches shall be bridged by the Contractor in a proper and secure manner so as not to interrupt travel. Free access shall be maintained at all times to all water gates, gas gates, and fire hydrants.

Abandonment of Work by Contractor

4. In the event the City Engineer certifies to the Commissioner that the work is not being so carried forward or if the Contractor at any time is not carrying on the work to the satisfaction of the Commissioner, or is not observing any of the provisions of the contract, or has abandoned the work, or become insolvent or assigned his property, the City, acting by the Commissioner and at his discretion, may, with or without notice to the Contractor, or advertising for doing the work, and by contract, day labor or otherwise, do any part of the work which the Contractor has failed to do or replace any part not done to the satisfaction of the Commissioner, or take possession of the work and complete the same, and in doing so may use any implements, machinery or materials on or about the work which are the property of the Contractor, charging the Contractor any excess cost for completing the work, which excess cost the Contractor agrees to pay.

ARTICLE 6 Compensation for Work

- 1. Subject to the provisions of Paragraph 10 of this Article, the price named in the proposal and accepted by the City shall be paid by the City and received by the Contractor as full compensation for furnishing materials and for use of tools, forms, machinery and other implements, and for labor in moving materials and executing all the work contemplated in this contract, also for loss or damage arising from delay however occasioned, or out of the nature of the work aforesaid or from the action of the elements, from floods, or from any unforeseen obstructions or difficulties which may be encountered in the prosecution of the same and for all risks of every description connected with the work and for well and faithfully completing the work in the proper manner and according to the plans and specifications and requirements of the Commissioner under them.
- 2. During the first week of each calendar month, the City Engineer shall cause all work done by the Contractor during the previous month to be measured and shall estimate the value thereof and, on or before the 10th of each month issue a certificate to the Commissioner of the measurements and the amount due the Contractor according to the terms of his contract.
- 3. The City shall pay the Contractor on approval of the Commissioner monthly on or before the 18th of each month for all work done during the preceding month according to the aforementioned certificate of the City Engineer, less 5 per cent of the amount of such work and less any amounts due the City by the Contractor.

Final and Substantial Completion

- 4.Upon substantial completion of the work required by the Contract, the Contractor must present to the City Engineer written certification that the work is substantially complete. Within 21 calendar days after such certification is presented, the City Engineer shall present to the Contractor either a written declaration that the work is substantially complete or an itemized list of incomplete or unsatisfactory work items sufficient to demonstrate that the work is not substantially complete. The City Engineer shall include with such itemized list a date by which the work items must be completed, which date may not be earlier than the date for substantial completion established in the Contract Documents. If the City Engineer does not respond as provided herein within 21 calendar days, then the date of the Contractor's certification shall become the date for effective declaration of substantial completion.
- 5. Within 15 calendar days after the effective declaration of substantial completion, the City Engineer shall send to the Contractor by certified mail, return receipt requested, a complete list of all incomplete or unsatisfactory work items. Unless delayed by causes beyond the Contractor's control, with an extension of time granted pursuant to Article 8, the Contractor must complete the work items within 45 calendar days after receipt of the list, or by the contractual completion date, whichever is later. If the contractor fails to complete the work within the required time the City may, notwithstanding other rights and remedies at its disposal, and upon seven days written notice to the Contractor terminate the contract and complete the incomplete or unsatisfactory work items and charge the cost of same to the Contractor.
- 6. Within 65 calendar days following the effective declaration of substantial completion, the City Engineer shall issue to the Commissioner who shall cause to be paid to the Contractor a substantial completion estimate which estimate shall consist of the balance of the then current contract price less a one percent retention, the estimated cost to complete incomplete or unsatisfactory work items, the value of any outstanding claims against the Contractor and the sum of all demands for direct payment made pursuant to Article 12 herein, provided that until final acceptance, the City shall retain five percent of the value of all items planted in the ground.
- 7. The Contractor shall provide written notice to the City Engineer when the work has been brought to final completion. Within ten days following receipt of such notice, and providing his inspection shows no work items remain incomplete or unsatisfactory, the City Engineer shall issue to the Commissioner a final certificate of the total amount of work done and the money due the Contractor therefor, crediting thereon the amounts of the previous payments. In making the final certificate, the City Engineer shall not be bound by any preceding certificate or estimate of the amount of work done or materials furnished.
- 8. Within 30 calendar days following receipt of final completion, the City shall pay the Contractor, on the approval of the Commissioner, the percentages retained and the balance due the Contractor according to the aforementioned final certificate of the City Engineer less any indebtedness of the Contractor for incomplete or unsatisfactory work or claims made by or against the City. If a claim or claims are made, or notice of liability given, such amounts due the Contractor may be paid upon satisfaction of such claims or upon furnishing of indemnity to said City against all loss, cost, damage or expense by reason of such claims.

9. The City, on making any payment after the completion of the work, shall be released from all claim or liability to the Contractor for anything done or used, or for any loss or injury sustained in carrying on the contract, or for any act, omission, neglect or mistake of the City or any person relating to or affecting the contract, except for the balance of any sum retained as aforesaid.

Extra Work

- 10. The Contractor shall be paid for any additions, or deductions as provided in Article 4, paragraph 1, and for extra labor done by, and for extra materials furnished by him in compliance with the written order only of the Commissioner, calling for work not similar in character to that covered by the items given in the proposal, and for which no price is set in the said written order, the direct (not including consequential) cost to the Contractor, as determined to be reasonable by the Commissioner, plus fifteen per cent of said costs as so determined in regard to labor only. For teams or trucks so furnished, no payment shall be made to the Contractor beyond the current local rate as determined by the Commissioner in each case. The direct cost of labor may include the cost of mechanics and laborers furnished and a reasonable proportion of the time of the foreman and timekeeper, but it shall in no case include any charge for the use of tools, for establishment charges or for time spent by the Contractor. The actual cost of insurance on extra pay rolls and of materials furnished for extra work, shall be paid without any addition. The labor and materials so ordered shall constitute a part of the work to be done under the contract; and all and singular the provisions of the contract shall apply to said labor and materials as if the same were specified therein. The Contractor shall have no claim for the above mentioned extra labor and materials unless he furnishes the details and bills therefor within one week after doing any such labor or furnishing any such materials.
- 11. No claim of the Contractor against the City under this contract shall be deemed valid unless such claim is presented to the Commissioner within ten days from the time when the Contractor first knows of, or has opportunity to know of, the acts and circumstances on which such claim is based.
- 12. A payment or payments to the Contractor, in cases where these provisions or any of them, are not complied with, shall not be construed as a waiver of said provisions or any part thereof.

Contract Made Subject to Appropriations

13. This contract is made subject to appropriation heretofore made and shall not be altered unless the Contractor, the sureties on the bond, if any, the officer making the contract and the Mayor shall in writing agree thereto.

ARTICLE 7

Liquidated Damages

1. In case the work embraced in the contract shall not have been substantially completed by the date(s) stipulated therein, the Contractor shall pay to the City of Newton as liquidated damages a designated sum per calendar day for the entire period of overrun until the work is substantially completed in accordance with the following Schedule of Deductions and, in addition, the Contractor shall pay without reimbursement the entire cost of all traffic officers, railroad flagmen, inspectors, or other personnel the City Engineer and/or the Chief Engineer of the railroad determines to be necessary during the period of overrun of time.

SCHEDULE OF DEDUCTIONS

To and Including	•	Charge
10 and including	Per Calend	ar Day
\$ 25.	,000.	\$ 30.
50,	,000.	50.
100.	,000.	100.
1,000	,000.	150.
2,000	,000.	200.
-		300.
	50, 100, 1,000,	•

- 2. In case the work covered by the contract shall not have been brought to final completion within 45 calendar days following the date of declaration of substantial completion, the Contractor shall pay to the City of Newton as liquidated damages the sum of \$150.00 for each week or portion thereof during the period of overrun until the work is complete.
- 3. Whatever sum of money may become due and payable to the City of Newton by the Contractor under this Article may be retained out of money belonging or owed to the Contractor in the hands and possession of or by the City of Newton. It is agreed that this Article shall be construed and treated by the parties to the contract not as imposing a penalty upon said Contractor for failing fully to complete said work as agreed on or before the time specified in the proposal, but as liquidated damages to compensate said City of Newton for all additional costs incurred by it because of the failure of the Contractor fully to complete said work on or before the date of completion specified in the proposal.

ARTICLE 8 Delays and Extensions of Time

- 1. If the Contractor is delayed at any time in the progress of the work by an act or neglect of the City, or by changes in the work ordered by the City, or by unseasonably inclement weather, or by other causes deemed by the City Engineer to be beyond the Contractor's control, and which the City Engineer determines may justify delay, then the time for completion may be extended for such reasonable time as the City Engineer may determine.
- 2. No such extension of time will be allowed unless the Contractor submits a written request for an extension to the City Engineer no later than 10 calendar days of the start of the occurrence or event giving rise thereto. Each such request must describe the occurrence or event and specify the manner and extent that such occurrence or event is causing or has caused a delay in the work. The City Engineer shall promptly investigate each request and make his written determination to the Commissioner and the Contractor within 10 days after receipt of the request. In his determination the City Engineer may either grant, deny, or modify the length of the requested extension.
- 3. If the City Engineer's determination so warrants, the Commissioner shall authorize a written Change Order to the Contract extending the time for completion. No extension of time shall be deemed as granted until said Change Order has been duly executed by the parties.
- 4. Change Orders which may be executed by the City and the Contractor in connection with additions, extra labor and/or extra materials shall not be considered as allowing extensions of the time for completion unless the change order expressly specifies that additional time is allowed in connection with the work under the change order. Once a Change Order has been executed by the parties, any request by the Contractor for an extension of time based solely on the fact that additions, extra labor and/or extra materials are required by the Change Order will be denied by the City Engineer.
- 5. Permitting the Contractor to continue and finish the work or any part of it after the times fixed for its completion, or after the date to which the time for completion may have been extended, shall in no way operate as a waiver on the part of the City of Newton of any of its rights under the contract. The Contractor remains liable for damages caused other than by delay.

ARTICLE 9 Lines and Grades

The Contractor shall retain a Registered Land Surveyor who shall furnish such boards and stakes and cause to be placed thereon, such lines, marks and directions relating to the work as the Commissioner or City Engineer shall from time to time direct.

ARTICLE 10 Public Service Pipes and Conduits

1. The Contractor shall maintain such pipes or conduits of public service corporations or of the City as are across or within the lines of the work until such time as said public service corporations or the City assume the maintenance or removal of said pipes or conduits. The Commissioner will notify such public service corporations to that effect on the existence of such obstructions to the work being brought to his notice by the Contractor. The City will relocate either temporarily or permanently all water mains and water service pipes, or hydrants, and drains or sewers which may interfere with the work contemplated in this contract. (This clause is not to be construed as applying to such pipes as may be readily supported and protected during the progress of the work.) The cost of shutting off and turning on water in water mains during blasting shall be assumed by the City.

Protection of Existing Structures

2. All existing gas pipes, water pipes, sewers, drains, conduits, or other structures which are uncovered by the excavation shall be carefully supported and protected from injury by the Contractor, and, in case of injury, they shall be restored by him, without compensation therefor, to as good condition as that in which they were found, and shall be kept in repair until 6 months after the completion of the work. The Contractor shall provide suitable temporary channels for water at all water courses. Wherever the work passes under or adjacent to street railway tracks, the Contractor shall make all necessary arrangements with the railway company for doing any work which may affect the property of the company or interfere with the operating of the railway, and he shall be liable for any damage that may be caused by any act, omission or neglect on his part, and shall pay all expenses of every kind incidental to this work.

Changing the Location of Existing Structures

3. Whenever it becomes necessary to change the location of any water or gas pipes, sewers, drains, conduits or other structures not otherwise provided for in these specifications, the Contractor shall do the whole or such portions of the work of making such changes as the Commissioner may require, and shall receive in payment therefor the reasonable cost of the work done as determined by the Commissioner plus 15 per cent of such cost. In estimating such cost, no allowance shall be made to the Contractor for the use of tools not especially provided for this work, for general superintendence, or for any overhead expenses except liability insurance.

ARTICLE 11 Co-operation with Other Contractors

The Contractor shall conduct the work in such manner as not to interfere with other work being done by the City, by contract or otherwise, and if deemed necessary by the Commissioner, the work under this contract shall conform to the progress of said other work; shall co-operate with other contractors or employees who may be doing work for the City, and with public service corporations affected by the work, in arranging for storage places, connections, bracings, temporary support for structures, repairs, etc.

ARTICLE 12 Subcontracts

- 1. The Contractor, in any contract with a Subcontractor, shall provide that the Subcontractor shall be subject to all specifications, terms, provisions, conditions, requirements and liabilities set forth in this contract so far as such specifications, terms, provisions, conditions, requirements and liabilities are applicable to the work to be done under such Subcontract, and shall also provide that such Subcontract shall be terminated by the Contractor whenever the Commissioner shall certify to him in writing that in his opinion the work of the Subcontractor is unnecessarily or unreasonably delayed or that the Subcontractor has violated any of the provisions of this contract. The Contractor shall at once terminate such subcontract if the Commissioner, after certifying as aforesaid, shall in writing direct the Contractor to make such termination.
- 2. Subcontracts shall be made in writing and the Contractor shall furnish the Commissioner with a copy of all Subcontracts on demand.
- 3. Pursuant to the provisions of M.G.L. Ch. 30, Sec. 39F (1), the following provisions are included in the General Conditions:
- (a) Forthwith after the Contractor receives payment on account of a periodic estimate, the Contractor shall pay to each Subcontractor the amount paid for the labor performed and the materials furnished by that Subcontractor, less any amount specified in any court proceedings barring such payment and also less any amount claimed due from the Subcontractor by the Contractor.
- (b) Not later than the sixty-fifth day after each Subcontractor substantially completes his work in accordance with the plans and specifications, the entire balance due under the Subcontract less amounts retained by the City as the estimated cost of completing the incomplete and unsatisfactory items of work, shall be due the Subcontractor; and the City shall pay that amount to the Contractor. The Contractor shall forthwith pay to the Subcontractor the full amount received from the

City less any amount specified in any court proceedings barring the payment and also less any amount claimed due from the Subcontractor by the Contractor.

- (c) Each payment made by the City to the Contractor pursuant to subparagraphs (a) and (b) of this paragraph for the labor performed and the materials furnished by a Subcontractor shall be made to the Contractor for the account of the Subcontractor; and the City shall take reasonable steps to compel the Contractor to make each such payment to each such Subcontractor. If the City has received a demand for direct payment from a Subcontractor for any amount which has already been included in a payment to the Contractor or which is to be included in a payment to the Contractor for payment to the Subcontractor as provided in subparagraphs (a) and (b), the City shall act upon the demand as provided in this section.
- (d) If, within seventy days after the Subcontractor has substantially completed the Subcontract work, the Subcontractor has not received from the Contractor the balance due under the Subcontract including any amount due for extra labor and materials furnished to the Contractor, less any amount retained by the City, the demand shall be by a sworn statement delivered to or sent by certified mail to the City, and a copy shall be delivered to or sent by certified mail to the Contractor at the same time. The demand shall contain a detailed breakdown of the balance due under the Subcontract and also a statement of the status of the completion of the Subcontract work shall be valid even if delivered or mailed prior to the seventieth day after which the Subcontractor has substantially completed the Subcontract work. Within ten days after the Subcontractor has delivered or so mailed the demand to the City and delivered or so mailed a copy to the Contractor, the Contractor may reply to the demand. The reply shall be by a sworn statement delivered to or sent by certified mail to the City and a copy shall be delivered to or sent by certified mail to the Subcontractor at the same time. The reply shall contain a detailed breakdown of the balance due under the Subcontract including any amount due for extra labor and materials furnished to the Contractor and of the amount due for each claim made by the Contractor against the Subcontractor.
- (e) Within fifteen days after receipt of the demand by the City, but in no event prior to the seventieth day after substantial completion of the Subcontract work, the City shall make direct payment to the Subcontractor of the balance due under the Subcontract including any amount due for extra labor and materials furnished to the Contractor, less any amount (i) retained by the City as the estimated cost of completing the incomplete or unsatisfactory items of work (ii) specified in any court proceedings barring such payment, or, (iii) if the reply shall not deduct from a direct payment any amount as provided in part (iii) if the reply is not sworn to, or for which the sworn reply does not contain the detailed breakdown required by subparagraph (d). The City shall make further direct payments to the Subcontractor forthwith after the removal of the basis for deductions from direct payments made as provided in parts (i) and (ii) of this subparagraph.
- (f) The City shall forthwith deposit the amount deducted from a direct payment as provided in part (iii) of subparagraph (e) in an interest-bearing joint account in the names of the Contractor and the Subcontractor in a bank in Massachusetts selected by the City or agreed upon by the Contractor and the Subcontractor and shall notify the Contractor and the Subcontractor of the date of the deposit and the bank receiving the deposit. The bank shall pay the amount in the account, including accrued interest, as provided in an agreement between the Contractor and the Subcontractor or as determined by decree of a court of competent jurisdiction.
- (g) All direct payments and all deductions from demands for direct payments deposited in an interest-bearing account or accounts in a bank pursuant to subparagraph (f) shall be made out of amounts payable to the Contractor at the time of receipt of a demand for direct payment from a Subcontractor and out of amounts which later become payable to the Contractor and in the order of receipt of such demands from Subcontractors. All direct payments shall discharge the obligation of the City to the Contractor to the extent of such payment.
- (h) The City shall deduct from payments to a Contractor amounts which, together with deposits in interest-bearing accounts pursuant to subparagraph (f), are sufficient to satisfy all unpaid balances of demands for direct payment received from Subcontractors. All such amounts shall be earmarked for such direct payments, and the Subcontractors shall have a right in such deductions prior to any claims against such amounts by creditors of the Contractor.

ARTICLE 13 Responsibility for Work-Contractor's Responsibility

The Contractor has made his proposal from his own examinations and estimates, and shall not hold the City, its agents, or employees, responsible for or bound by, any schedule, estimate, sounding, boring, or any plan of any part of the work; shall, if any error in any plan, drawing, specification or direction relating to anything to be done under the contract come to his knowledge, report it at once to the Commissioner; shall not, except as the Commissioner shall authorize in writing, assign or sublet any part of the contract except for the supply of materials and plant, or of anything to be done

thereunder; shall, subject to the provisions of the contract take all responsibility of, and bear all losses resulting to him in carrying on the contract, and shall assume the defense of, and hold the City, its agents and employees harmless from all suits and claims against them, or any of them, arising from the use of any invention, patent or patent right, material, labor or implement, by or from any act or omission or neglect of the Contractor, his Subcontractor, his agents or employees, in carrying on the contract, or for any liability of any nature arising under the contract. The Contractor shall be solely responsible and liable for, and shall fully protect and indemnify the City against all claims for damages to persons or property occasioned by or resulting from blasting or other methods or processes in the work of construction, whether such damages be attributable to negligence of the Contractor, his employees or his Subcontractor or otherwise.

ARTICLE 14 Lights--Guards

- 1. The Contractor shall assume all responsibilities of the work and take all proper precautions to protect persons and property from injury and unnecessary interference; leave a reasonably unobstructed way along public and private places for pedestrians, teams, and vehicles, and for access to hydrants; provide proper walks over or around any obstruction made in a public or private place in carrying on the contract, and maintain from the beginning of twilight through the whole of every night, on or near the obstruction sufficient lights and guards to protect travelers from injury thereby, and if, after one notification from the Commissioner that said lights and guards are not sufficient, the Contractor has not placed additional lights and guards to the satisfaction of the Commissioner, the Commissioner shall have the right to take charge of that part of the work at the expense of the Contractor. While the work is suspended he shall keep all roadways and sidewalks in proper condition, and when the work is completed put the place and vicinity in proper condition and so leave them.
- 2. The Contractor shall provide proper means of access to property where the existing access is cut off by the Contractor and replace or put in good condition every conduit, catch-basin, tree, wall, fence, or other thing injured by the Contractor in carrying on the contract, unless the same has been permanently done away with, on approval of the Commissioner, as being necessary to the proper carrying on of the contract.

ARTICLE 15 Guaranty

- 1. Any settlement or other defect, or the failure of any part of the structure or the work due to defective materials or workmanship, that occurs within one year after the work is completed, is to be immediately repaired by the Contractor. In the event of any such settlement, defect, or failure causing liability to the City for damage to persons or property, the Contractor does by this clause agree to hold the City harmless and to assume the defense of any claims therefor.
- 2. Responsibility under this guaranty for the adequacy of the work does not relieve the Contractor of his obligation to comply with the terms of the contract and to conform to all the requirements of the plans and specifications, nor does it give him the right to deviate in any way from the details of design of the structure or the work.

ARTICLE 16 Defective Work and Materials

The inspection of the work shall not relieve the Contractor of any of his obligations to fulfill his contract as herein described, and defective work shall be made good and unsuitable materials may be rejected, notwithstanding that such work and materials have been previously overlooked by the Engineer and accepted or estimated for payment. If the work or materials, or any part thereof shall be found defective at any time before the final acceptance of the whole work, the Contractor shall forthwith make good such defect in a manner satisfactory to the Engineer, and if any material brought upon the ground for use in the work or selected for the same, shall be condemned by the Engineer as unsuitable or not in conformity with the specifications, the Contractor shall forthwith remove such materials from the vicinity of the work. Nothing in this contract shall be construed as vesting in the Contractor any right of property in the materials used after they have been attached or affixed to the work or the soil, but all materials shall, upon being so attached or affixed, become the property of the City.

ARTICLE 17 Employment of Labor

The Contractor shall give preference in employment, first to citizens of Massachusetts, second, to other citizens of the United States; and shall allow all employees on said work to lodge, board and trade where they choose, and shall not obstruct any other person in doing work for the City; and shall conform to all labor laws of the Commonwealth; and no laborer or teamster, workman or mechanic working within this Commonwealth in the employ of the Contractor or Subcontractor or other person doing or contracting to do the whole or a part of the work contemplated by the Contractor shall be requested to, or required to, or work more than eight hours in any one calendar day. This contract is subject to all the laws of the Commonwealth, and ordinances of the City and if any clause thereof does not conform to such laws and ordinances, such clause shall be void and such laws and ordinances operated in lieu thereof.

ARTICLE 18 Laws and Regulations - Contractor to Comply with Law

The Contractor shall keep fully informed of all existing or future acts of the legislature, and of all municipal ordinances, prohibitions, rules and regulations in any manner affecting the conduct of the work, and of all orders or decrees of any body or tribunal having any jurisdiction or authority over the materials, times, places and actions of those employed in the work embraced in the contract. The Contractor shall at all times observe and comply with all existing and future acts, ordinances, prohibitions, rules, regulations, orders and decrees; and shall protect and indemnify the city and its employees against any and all claims arising from or based on any violation of such acts, ordinances, prohibitions, rules, regulations, orders or decrees, and against all violations of law by the Contractor or his agents or employees.

END OF SECTION

CITY OF NEWTON

WAGE RATE REQUIREMENTS

1. GENERAL

- A. This section summarizes the requirements for the payment of wages to laborers and mechanics employed under the Contract.
- **B**. Other duties and requirements of law which may not be specified in this section apply and are inherently a part of the Contract.

2. WAGE RATES

- A. The rate per hour to be paid to mechanics, apprentices, teamsters, chauffeurs, and laborers employed on the Work shall not be less than the rate of wages in the attached "Minimum Wage Rates" as determined by the Commissioner of Labor and Industries. This schedule shall continue to be the minimum rate of wages for said employees during the life of this Contract.
- **B.** Keep posted on the site a legible copy of said schedule. Keep on file the wage rates and classifications of labor employed on this Work in order that they may be available for inspection by the Owner, Administrator, or the Architect.
- **C.** Apprentices employed pursuant to this determination of wage rates must be registered and approved by the State Apprenticeship Council wherever rates for journeymen or apprentices are not listed.
- **D.** Pay reserve police officers employed on the Work the prevailing rate of wages paid to regular police officers as required by M.G.L. c149, Sec. 34B, as amended. Such police officers shall be covered by Workmen's Compensation Insurance and Employers Liability Insurance by the Contractor.
- E. The Contractor and all subcontractors shall, on a weekly basis throughout the term of the contract, provide to the City of Newton certified payroll affidavits verifying compliance with M.G.L. c.149, Sec. 27, 27A and 27B. The Contractor is obiligated to provide such records to the City directly on a weekly basis. The City may assess a penalty of \$100 for each day beyond the required submission date that such records are received, which amount shall be deducted from any amounts to the Contractor from the City. In the event of chronic late submissions, the City shall report the same to the Office of the Attorney General.
- **F.** The Contractor and all subcontractors shall provide a Statement of Compliance within 15 days of the completion of its portion of the work. This statement shall be submitted to the Owner on the form found elsewhere in this section.
- **G.** The Contractor shall maintain accurate and complete records, including payroll records, during the Contract term and for three years thereafter.

END OF SECTION



CHARLES D. BAKER KARYN E, POLITO

THE COMMONWEALTH OF MASSACHUSETTS EXECUTIVE OFFICE OF LABOR AND WORKFORCE DEVELOPMENT DEPARTMENT OF LABOR STANDARDS

Prevailing Wage Rates

As determined by the Director under the provisions of the Massachusetts General Laws, Chapter 149, Sections 26 to 27H RONALD L. WALKER, II WILLIAM D MCKINNEY

Awarding Authority:

City of Newton

Contract Number:

#16-110

City/Town: NEWTON

Description of Work:

2016 Citywide Micro-Surfacing

Job Location:

Various locations

Information about Prevailing Wage Schedules for Awarding Authorities and Contractors

- This wage schedule applies only to the specific project referenced at the top of this page and uniquely identified by the "Wage Request Number" on all pages of this schedule.
- · An Awarding Authority must request an updated wage schedule from the Department of Labor Standards ("DLS") if it has not opened bids or selected a contractor within 90 days of the date of issuance of the wage schedule. For CM AT RISK projects (bid pursuant to G.L. c.149A), the earlier of: (a) the execution date of the GMP Amendment, or (b) the bid for the first construction scope of work must be within 90-days of the wage schedule issuance date.
- The wage schedule shall be incorporated in any advertisement or call for bids for the project as required by M.G.L. c. 149, § 27. The wage schedule shall be made a part of the contract awarded for the project. The wage schedule must be posted in a conspicuous place at the work site for the life of the project in accordance with M.G.L. c. $149 \S 27$. The wages listed on the wage schedule must be paid to employees performing construction work on the project whether they are employed by the prime contractor, a filed sub-bidder, or any sub-contractor.
- All apprentices working on the project are required to be registered with the Massachusetts Department of Labor $Standards, Division \ of \ Apprentice \ Standards \ (DLS/DAS). \ Apprentice \ must \ keep \ his/her \ apprentice \ identification \ card \ on$ his/her person during all work hours on the project. An apprentice registered with DAS may be paid the lower apprentice wage rate at the applicable step as provided on the prevailing wage schedule. Any apprentice not registered with DLS/DAS regardless of whether or not they are registered with any other federal, state, local, or private agency must be paid the journeyworker's rate for the trade.
- The wage rates will remain in effect for the duration of the project, except in the case of multi-year public construction projects. For construction projects lasting longer than one year, awarding authorities must request an updated wage schedule. Awarding authorities are required to request these updates no later than two weeks before the anniversary of the date the contract was executed by the awarding authority and the general contractor. For multi-year CM AT RISK projects, awarding authority must request an annual undate no later than two weeks before the anniversary date, determined as the earlier of: (a) the execution date of the GMP Amendment, or (b) the execution date of the first amendment to permit procurement of construction services. Contractors are required to obtain the wage schedules from awarding authorities, and to pay no less than these rates to covered workers. The annual update requirement is not applicable to 27F "rental of equipment" contracts.
- Every contractor or subcontractor which performs construction work on the project is required to submit weekly payroll reports and a Statement of Compliance directly to the awarding authority by mail or email and keep them on file for three years. Each weekly payroll report must contain: the employee's name, address, occupational classification, hours worked, and wages paid. Do not submit weekly payroll reports to DLS. A sample of a payroll reporting form may be obtained at http://www.mass.gov/dols/pw.
- Contractors with questions about the wage rates or classifications included on the wage schedule have an affirmative obligation to inquire with DLS at (617) 626-6953.
- Employees not receiving the prevailing wage rate set forth on the wage schedule may report the violation to the Fair Labor Division of the office of the Attorney General at (617) 727-3465.
- Failure of a contractor or subcontractor to pay the prevailing wage rates listed on the wage schedule to all employees who perform construction work on the project is a violation of the law and subjects the contractor or subcontractor to civil and

Issue Date:

06/14/2016

Wage Request Number: 20160614-015

Classification Construction	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
(2 AXLE) DRIVER - EQUIPMENT	06/01/2016	\$33.25	\$10.41	\$10.08	\$0.00	\$53.74
FEAMSTERS JOINT COUNCIL NO. 10 ZONE A	08/01/2016	\$33,25	\$10.91	\$10.08	\$0.00	\$54.24
	12/01/2016	\$33.25	\$10.91	\$10.89	\$0.00	\$55.05
3 AXLE) DRIVER - EQUIPMENT	06/01/2016	\$33.32	\$10.41	\$10.08	\$0.00	\$53.81
FEAMSTERS JOINT COUNCIL NO. 10 ZONE A	08/01/2016	\$33.32	\$10.91	\$10.08	\$0.00	\$54.31
	12/01/2016	\$33.32	\$10.91	\$10.89	\$0.00	\$55.12
4 & 5 AXLE) DRIVER - EQUIPMENT	06/01/2016	\$33.44	\$10.41	\$10.08	\$0.00	\$53.93
FEAMSTERS JOINT COUNCIL NO. 10 ZONE A	08/01/2016	\$33.44	\$10.91	\$10.08	\$0.00	\$54.43
	12/01/2016	\$33.44	\$10.91	\$10.89	\$0.00	\$55.24
ADS/SUBMERSIBLE PILOT PILE DRIVER LOCAL 56 (ZONE I)	08/01/2015	\$88.29	\$9.80	\$19.23	\$0.00	\$117.32
For apprentice rates see "Apprentice- PILE DRIVER"						
AIR TRACK OPERATOR	06/01/2016	\$36.85	\$7.45	\$13.55	\$0.00	\$57.85
ABORERS - ZONE 1 For apprentice rates see "Apprentice- LABORER"	12/01/2016	\$37.85	\$7.45	\$13.55	\$0.00	\$58.85
ASBESTOS REMOVER - PIPE / MECH. EQUIPT. HEAT & FROST INSULATORS LOCAL 6 (BOSTON)	12/01/2015	\$34.38	\$10.40	\$5.95	\$0.00	\$50.73
ASPHALT RAKER	06/01/2016	\$36.35	\$7.45	\$13.55	\$0.00	\$57.35
ABORERS - ZONE 1 For apprentice rates see "Apprentice- LABORER"	12/01/2016	\$37.35	\$7.45	\$13.55	\$0.00	\$58.35
ASPHALT/CONCRETE/CRUSHER PLANT-ON SITE	06/01/2016	\$44.23	\$10.00	\$15,15	\$0.00	\$69.38
OPERATING ENGINEERS LOCAL 4	12/01/2016	\$45.48	\$10.00	\$15.15	\$0.00	\$70.63
•	06/01/2017	\$46.48	\$10.00	\$15.15	\$0.00	\$71.63
	12/01/2017	\$47.48	\$10.00	\$15.15	\$0.00	\$72.63
For apprentice rates see "Apprentice- OPERATING ENGINEERS"	12/01/2017	9 47.40	310.00	910.10	\$0.00	\$72.03
BACKHOE/FRONT-END LOADER	06/01/2016	\$44.23	\$10.00	\$15.15	\$0.00	\$69.38
PPERATING ENGINEERS LOCAL 4	12/01/2016	\$45.48	\$10.00	\$15.15	\$0.00	\$70.63
	06/01/2017	\$46.48	\$10.00	\$15.15	\$0.00	\$71.63
	12/01/2017	\$47.48	\$10.00	\$15.15	\$0.00	\$72.63
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
BARCO-TYPE JUMPING TAMPER ABORERS - ZONE 1	06/01/2016	\$36.35	\$7.45	\$13.55	\$0.00	\$57.35
For apprentice rates see "Apprentice- LABORER"	12/01/2016	\$37.35	\$7.45	\$13.55	\$0.00	\$58.35
BLOCK PAVER, RAMMER / CURB SETTER	06/01/2016	\$36.85	\$7.45	\$13.55	\$0.00	\$57.85
ABORERS - ZONE I	12/01/2016	\$37.85	\$7.45	\$13.55	\$0.00	\$58.85
For apprentice rates see "Apprentice- LABORER"						
BOILER MAKER BOILERMAKERS LOCAL 29	01/01/2016	\$41.62	\$6.97	\$16.21	\$0.00	\$64.80
OULBIWHABRO LOCALI 19	01/01/2017	\$42.92	\$6.97	\$16.21	\$0.00	\$66.10

Issue Date: 06/14/2016 Wage Request Number: 20160614-015 Page 2 of 33

Step	ve Date - percent	01/01/2016	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate	
1	65		\$27.05	\$6.97	\$10.54	\$0.00	\$44.56	
2	65	•	\$27.05	\$6.97	\$10.54	\$0.00	\$44.56	
3	70		\$29.13	\$6.97	\$11.35	\$0.00	\$47.45	
4	75		\$31.22	\$6.97	\$12.16	\$0.00	\$50.35	
5	80		\$33.30	\$6.97	\$12.97	\$0.00	\$53.24	
6	85		\$35.38	\$6.97	\$13.78	\$0.00	\$56.13	
7	90		\$37.46	\$6.97	\$14.59	\$0.00	\$59.02	
8	95		\$39.54	\$6.97	\$15.40	\$0.00	\$61.91	
Effecti	ve Date -	01/01/2017				Supplemental		
Step	percent		Apprentice Base Wage	Health	Pension	Unemployment	Total Rate	
1	65		\$27.90	\$6.97	\$10.54	\$0.00	\$45.41	
2	65		\$27.90	\$6.97	\$10.54	\$0.00	\$45.41	
3	70		\$30.04	\$6.97	\$11.35	\$0.00	\$48.36	
4	75		\$32.19	\$6.97	\$12.16	\$0.00	\$51.32	
5	80		\$34.34	\$6.97	\$12.97	\$0.00	\$54.28	
6	85		\$36.48	\$6.97	\$13.78	\$0.00	\$57.23	
7	90		\$38.63	\$6.97	\$14.59	\$0.00	\$60.19	
8	95		\$40.77	\$6.97	\$15.40	\$0.00	\$63.14	
Notes:								
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Appre	ntice to Jo	urneyworker Ratio:1:5	 					
STONE/ARTIF PROOFING)	ICIAL MA	SONRY (INCL. MASONR	Y 02/01/201	5 \$49.86	\$10.18	\$19.14	\$0.00	\$79.18
				5 \$50.76	\$10.18	\$19.22	\$0.00	\$80.16

 Issue Date:
 06/14/2016
 Wage Request Number:
 20160614-015
 Page 3 of 33

Total Rate

Apprentice - BRICK/PLASTER/CEMENT MASON - Local 3 Newton

	ive Date - 02/01/2016				Cumplemental		
Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate	
1	50	\$24.93	\$10.18	\$19.14	\$0.00	\$54.25	
2	60	\$29.92	\$10.18	\$19.14	\$0.00	\$59.24	
3	70	\$34.90	\$10.18	\$19.14	\$0.00	\$64.22	
4	80	\$39.89	\$10.18	\$19.14	\$0.00	\$69.21	
5	90	\$44.87	\$10.18	\$19.14	\$0.00	\$74.19	
Effect	ive Date - 08/01/2016				Supplemental		
Step	percent	Apprentice Base Wage	Health	Pension	Unemployment	Total Rate	
1	50	\$25.38	\$10.18	\$19.22	\$0.00	\$54.78	
2	60	\$30.46	\$10.18	\$19.22	\$0.00	\$59.86	
3	70	\$35.53	\$10.18	\$19.22	\$0.00	\$64.93	
4	80	\$40.61	\$10.18	\$19.22	\$0.00	\$70.01	
5	90	\$45.68	\$10.18	\$19.22	\$0.00	\$75.08	
Notes							
						i	
	ntice to Journeyworker B	atio:1:5					
ULLDOZER/GRADE PERATING ENGINEERS L		06/01/2010	6 \$43.81	\$10.00	\$15.15	\$0.00	\$68.96
LIGHTING ENGINEERS E	JCHL T	12/01/2010	6 \$45.04	\$10.00	\$15.15	\$0.00	\$70.19
		06/01/2017	7 \$46.03	\$10.00	\$15.15	\$0.00	\$71.18
For apprentice rates see	"Apprentice- OPERATING ENGI	12/01/201' NEERS"	7 \$47.02	\$10.00	\$15.15	\$0.00	\$72.17
AISSON & UNDERF	TINNING BOTTOM MAN	06/01/2010	6 \$37.20	\$7.45	\$13.75	\$0.00	\$58.40
	"Apprentice- LABORER"	12/01/2016	6 \$38.20	\$7.45	\$13.75	\$0.00	\$59.40
AISSON & UNDERF	INNING LABORER	06/01/2010	6 \$36.05	\$7,45	\$13.75	\$0.00	\$57.25
ABORERS - FOUNDATION	AND MARINE	12/01/2010		\$7.45	\$13.75	\$0.00	\$58.25
For apprentice rates see	"Apprentice- LABORER"	12707201	0 437.03	97.10	******	4	QD 0.20
AISSON & UNDERF		06/01/2010	6 \$36.05	\$7.45	\$13.75	\$0.00	\$57.25
ABORERS - FOUNDATION	"AND MARINE "Apprentice- LABORER"	12/01/2016	\$37.05	\$7.45	\$13.75	\$0.00	\$58.25
ARBIDE CORE DRI		06/01/2010	6 \$36.35	\$7.45	\$13.55	\$0.00	\$57.35
ABORERS - ZONE 1		12/01/2010		\$7.45	\$13.55	\$0.00	\$58.35
For apprentice rates see	"Apprentice- LABORER"	03/01/2016	6 \$37.10	\$9.80	\$16.82	\$0.00	\$63.72
ARPENTERS -ZONE 2 (Eas	tern Massachusetts)	09/01/2010		\$9.80	\$16.82	\$0.00	\$64.70
		03/01/201		\$9.80	\$16.82	\$0.00	\$65.67
		09/01/201		\$9.80	\$16.82	\$0.00	\$66.68
		03/01/201		\$9.80	\$16.82	\$0.00	\$67.68
		09/01/2013		\$9.80	\$16.82	\$0.00	\$68.72
		03/01/2019		\$9.80	\$16.82	\$0.00	\$69.75
		03/01/2019	7 343.13	39.80	Ø10.82	JU.UU	307.73

Effective Date Base Wage Health Pension Supplemental Total Rate Unemployment

	Effect Step	ive Date - 03/01/2016 percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
	1	50	\$18.55	\$9.80	\$1.63	\$0.00	\$29.98
	2	60	\$22,26	\$9.80	\$1.63	\$0.00	\$33.69
	3	70	\$25.97	\$9.80	\$11.93	\$0.00	\$47.70
	4	75	\$27.83	\$9.80	\$11.93	\$0.00	\$49.56
	5	80	\$29.68	\$9.80	\$13.56	\$0.00	\$53.04
	6	80	\$29.68	\$9.80	\$13.56	\$0.00	\$53.04
	7.	90	\$33.39	\$9.80	\$15.19	\$0.00	\$58.38
	8	90	\$33.39	\$9.80	\$15.19	\$0.00	\$58.38
	Effect Step	ive Date - 09/01/2016 percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
	1	50	\$19.04	\$9.80	\$1.63	\$0.00	\$30.47
	2	60	\$22.85	\$9.80	\$1.63	\$0.00	\$34.28
	3	70	\$26.66	\$9.80	\$11.93	\$0.00	\$48.39
	4	75	\$28,56	\$9.80	\$11.93	\$0.00	\$50.29
	5	80	\$30.46	\$9.80	\$13.56	\$0.00	\$53.82
	6	80	\$30.46	\$9.80	\$13.56	\$0.00	\$53.82
	7	90	\$34.27	\$9.80	\$15.19	\$0.00	\$59.26
	8	90	\$34.27	\$9.80	\$15.19	\$0.00	\$59.26
	Notes:						·
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	Appre	ntice to Journeyworker R	atio:1:5				
NT M	ASONRY	/PLASTERING	01/01/2010	\$46.	44 \$10.90	\$18.71	\$1.30 \$77

Classification

Step	percent	Apprentice Base Wage	Health	Pension	Unemployment	Total Rate
1	50	\$23.22	\$10.90	\$12.21	\$0.00	\$46.33
2	60	\$27.86	\$10.90	\$13.71	\$1.30	\$53.77
3	65	\$30.19	\$10.90	\$14.71	\$1.30	\$57.10
4	70	\$32.51	\$10.90	\$15.71	\$1.30	\$60.42
5	75	\$34.83	\$10.90	\$16.71	\$1.30	\$63.74
6	80	\$37.15	\$10.90	\$17.71	\$1.30	\$67.06
7	90	\$41.80	\$10.90	\$18.71	\$1.30	\$72.71
Notes		All other steps are 1,000 hrs.		- 	. — — —	

Classification			Effective Da	te Base W	age Health	Pension	Supplemental Unemployment	Total Ra
CHAIN SAW (LABORERS - ZON		ror	06/01/2016	\$36.	35 \$7.45	\$13.55	\$0.00	\$57.35
		"Apprentice- LABORER"	12/01/2016	\$37	35 \$7.45	\$13.55	\$0.00	\$58.35
		TAPPRENICE- LABORER RY BUCKETS/HEADING MAC	HINES 06/01/2016	i \$45,:	23 \$10.00	\$15.15	\$0.00	\$70.38
OPERATING ENG			12/01/2010			\$15.15 \$15.15	\$0.00	
			06/01/2013		•	\$15.15 \$15.15	\$0.00	\$71.63 \$72.63
			12/01/2013			\$15.15	\$0.00	\$72.63
For apprentic	e rates see	"Apprentice- OPERATING ENGINEERS"	12/01/201	348.	48 \$10.00	313,13	30.00	\$73.03
COMPRESSO			06/01/2016	§30.·	40 \$10.00	\$15.15	\$0.00	\$55.55
PERATING ENG	SINEERS L	CAL 4	12/01/2016	\$31,:	27 \$10.00	\$15.15	\$0.00	\$56.42
			06/01/2013			\$15.15	\$0.00	\$57.11
			12/01/2013			\$15.15	\$0.00	\$57.80
		*Apprentice- OPERATING ENGINEERS"				•		
DELEADER (1 PAINTERS LOCAL			01/01/2016	\$49.	51 \$7.85	\$16.10	\$0.00	\$73.46
LIND LUCHI	2014	* *	07/01/2016	\$50.	46 \$7.85	\$16.10	\$0.00	\$74.41
			01/01/2017	\$51.	41 \$7.85	\$16.10	\$0.00	\$75.36
	Step 1	•						
	Step	ive Date - 01/01/2016 percent	Apprentice Base Wage	Health	Pension	Supplementa Unemploymen		
	i	50	\$24.76	\$7.85	\$0.00	\$0.00	\$32.61	
	2	55	\$27.23	\$7.85	\$3.66	\$0.00	\$38.74	
	3	60	\$29.71	\$7.85	\$3.99	\$0.00	\$41.55	
	4	65	\$32.18	\$7.85	\$4.32	\$0.00	\$44.35	
	5	70	\$34.66	\$7.85	\$14.11	\$0.00	\$56.62	
	6	75	\$37.13	\$7.85	\$14.44	\$0.00	\$59.42	
	7	80	\$39.61	\$7.85	\$14.77	\$0.00	\$62.23	
	8	90	\$44.56	\$7.85	\$15.44	\$0.00	\$67.85	
	E Const	ve Date - 07/01/2016						
	Step	percent	Apprentice Base Wage	Health	Pension	Supplementa Unemploymen		
	1	50	\$25.23	\$7.85	\$0.00	\$0.00		
	2	55	\$27.75	\$7.85	\$3.66	\$0.00		
	- 3	60	\$30.28	\$7.85	** \$3.99	\$0.00		
	4	65	\$32.80	\$7.85	\$4.32	\$0.00		
	5	70	\$35.32	\$7.85	\$14.11	\$0.00		
	6	75	\$37.85	\$7.85	\$14.44	\$0.00		
	7	80	\$40.37	\$7.85	\$14.77	\$0.00		
		90	\$45.41	\$7.85	\$15.44	\$0.00		
	8	411	\$45.41	\$7,60	\$13.44	30.00	, 308.70	
	8							
	Notes:	· · · · · · · · · · · · · · · · · · ·						

DEMO: ADZEMAN
LABORERS - ZONE I 12/01/2015 \$35.50 \$7.45 \$13.55 \$0.00 \$56.50
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Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
For apprentice rates see "Apprentice- LABORER"						
DEMO: BACKHOE/LOADER/HAMMER OPERATOR LABORERS - ZONE !	12/01/2015	\$36.50	\$7.45	\$13.55	\$0.00	\$57.50
For apprentice rates see "Apprentice- LABORER"						
DEMO: BURNERS LABORERS - ZONE I	12/01/2015	\$36.25	\$7.45	\$13.55	\$0.00	\$57.25
For apprentice rates see "Apprentice- LABORER"						
DEMO: CONCRETE CUTTER/SAWYER LABORERS - ZONE 1	12/01/2015	\$36.50	\$7.45	\$13.55	\$0.00	\$57.50
For apprentice rates see "Apprentice- LABORER"						
DEMO: JACKHAMMER OPERATOR LABORERS - ZONE 1	12/01/2015	\$36.25	\$7.45	\$13.55	\$0.00	\$57.25
For apprentice rates see "Apprentice- LABORER"						
DEMO: WRECKING LABORER LABORERS - ZONE 1	12/01/2015	\$35.50	\$7.45	\$13.55	\$0.00	\$56.50
For apprentice rates see "Apprentice- LABORER"						
DIRECTIONAL DRILL MACHINE OPERATOR	06/01/2016	\$43.81	\$10.00	\$15.15	\$0.00	\$68.96
OPERATING ENGINEERS LOCAL 4	12/01/2016	\$45.04	\$10.00	\$15.15	\$0.00	\$70.19
	06/01/2017	\$46,03	\$10.00	\$15.15	\$0.00	\$71.18
	12/01/2017	\$47.02	\$10.00	\$15.15	\$0.00	\$72.17
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
DIVER PILE DRIVER LOCAL 56 (ZONE I)	08/01/2015	\$58.86	\$9.80	\$19.23	\$0.00	\$87.89
For apprentice rates see "Apprentice- PILE DRIVER"						
DIVER TENDER PILE DRIVER LOCAL 56 (ZONE 1)	08/01/2015	\$42.04	\$9.80	\$19.23	\$0.00	\$71.07
For apprentice rates see "Apprentice- PILE DRIVER"						
DIVER TENDER (EFFLUENT) PILE DRIVER LOCAL 56 (ZONE 1)	08/01/2015	\$63.06	\$9.80	\$19.23	\$0.00	\$92.09
For apprentice rates see "Apprentice- PILE DRIVER"						
DIVER/SLURRY (EFFLUENT) PILE DRIVER LOCAL 56 (ZONE 1)	08/01/2015	\$88.23	\$9.80	\$19.23	\$0.00	\$117.26
For apprentice rates see "Apprentice-PILE DRIVER"						
DRAWBRIDGE OPERATOR (Construction) ELECTRICIANS LOCAL, 103	03/01/2016	\$46.17	\$13.00	\$16.39	\$0.00	\$75.56
For apprentice rates see "Apprentice-ELECTRICIAN"						
ELECTRICIAN FLECTRICIANS LOCAL 103	03/01/2016	\$46.17	\$13.00	\$16.39	\$0.00	\$75.56

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Elle Step	percent 03/01/2016	Apprentice Base Wage	Health	Pension	Supplemental Unempfoyment	Total Rate	
1	40	\$18.47	\$13.00	\$0.55	\$0.00	\$32.02	
2	40	\$18.47	\$13.00	\$0.55	\$0.00	\$32.02	
3	45 .	\$20.78	\$13.00	\$12.34	\$0.00	\$46.12	
4	45	\$20.78	\$13.00	\$12.34	\$0.00	\$46.12	
5	50	\$23.09	\$13.00	\$12.71	\$0.00	\$48.80	
6	55	\$25.39	\$13.00	\$13.07	\$0.00	\$51.46	
. 7	60	\$27.70	\$13.00	\$13.44	\$0.00	\$54.14	
8	65	\$30.01	\$13.00	\$13.81	\$0.00	\$56.82	
9	70	\$32.32	\$13.00	\$14.18	\$0.00	\$59.50	
. 10	75	\$34.63	\$13.00	\$14.55	\$0.00	. \$62.18	
Note	s: : App Prior 1/1/03; 30/35/4	0/45/50/55/65/70/75/80					
<u> </u>							
Арр	rentice to Journeyworker R	atio:2:3***					
EVATOR CONST		01/01/2016	\$54.53	\$14.43	\$14.96	\$0.00	\$83.92
VATOR CONSTRUCTO	RS LOCAL 4	01/01/2013	\$55.86	\$15.28	\$15.71	\$0.00	\$86.85

		ELEVATOR CONSTRUCTOR*	01/01/2011	7 \$39.10	\$15.28	\$15,71	\$0.00	\$70.09
VATOR CONS'		ELPER ·	01/01/2016	\$38.17	\$14.43	\$14.96	\$0.00	\$67.56
App	rentice to Jo	urneyworker Ratio:1:1						
, [
Not		e are 6 mos.; Steps 3-5 are 1 y	/ear				1	
					J 13./1	30.00	3/3.06 	
5	70 80		\$39.10 \$44.69	\$15.28 \$15.28	\$15.71 \$15.71	\$0.00 \$0.00	\$70.09 \$75.68	
3	65		\$36.31	\$15.28	\$15.71	\$0.00	\$67.30	
2	55		\$30.72	\$15.28	\$15.71	\$0.00	\$61.71	
1	50		\$27.93	\$15.28	\$0.00	\$0.00	\$43.21	
Ster	percent		Apprentice Base Wage	Health	Pension	Unemployment	Total Rate	
Effe	ctive Date -	01/01/2017				Supplemental	,	
5	80		\$43.62	\$14.43	\$14.96	\$0.00	\$73.01	
4	70		\$38.17	\$14.43	\$14.96	\$0.00	\$67.56	
3	65		\$35.44	\$14.43	\$14.96	\$0.00	\$64.83	
2	55		\$29.99	\$14.43	\$14.96	\$0.00	\$59.38	
1	50		\$27.27	\$14.43	\$0.00	\$0.00	\$41.70	
Ster	ctive Date -	01/01/2016	Apprentice Base Wage	Health '	Pension	Supplemental Unemployment	Total Rate	

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
FENCE & GUARD RAIL ERECTOR LABORERS - ZONE I	06/01/2016	\$36.35	\$7.45	\$13.55	\$0.00	\$57.35
	12/01/2016	\$37.35	\$7.45	\$13.55	\$0.00	\$58.35
For apprentice rates see "Apprentice- LABORER"						
RELD ENG.INST.PERSON-BLDG,SITE,HVY/HWY OPERATING ENGINEERS LOCAL 4	05/01/2016	\$41.03	\$10.00	\$14.90	\$0.00	\$65.93
A LIGHTHO ENGINELISE EQUAL 4	11/01/2016	\$41.62	\$10.00	\$14.90	\$0.00	\$66.52
	05/01/2017	\$42.50	\$10.00	\$14.90	\$0.00	\$67.40
·	11/01/2017	\$43.23	\$10.00	\$14.90	\$0.00	\$68.13
	05/01/2018	\$43.94	\$10.00	\$14.90	\$0.00	\$68.84
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
TELD ENG.PARTY CHIEF-BLDG,SITE,HVY/HWY PPERATING ENGINEERS LOCAL 4	05/01/2016	\$42.47	\$10.00	\$14.90	\$0.00	\$67.37
I EIGHING ENGINEELS EOCAL 4	11/01/2016	\$43.07	\$10.00	\$14.90	\$0.00	\$67.97
	05/01/2017	\$43.96	\$10.00	\$14.90	\$0.00	\$68.86
	11/01/2017	\$44.69	\$10.00	\$14.90	\$0.00	\$69.59
For apprentice rates see "Apprentice- OPERATING ENGINEERS"	05/01/2018	\$45.41	\$10.00	\$14.90	\$0.00	\$70.31
IELD ENG.ROD PERSON-BLDG,SITE,HVY/HWY PERATING ENGINEERS LOCAL 4	05/01/2016	\$21.88	\$10.00	\$14.90	\$0.00	\$46.78
PERATING ENGINEERS LOCAL 4	11/01/2016	\$22.23	\$10.00	\$14.90	\$0.00	\$47.13
	05/01/2017	\$22.76	\$10.00	\$14.90	\$0.00	\$47.66
	11/01/2017	\$23.18	\$10.00	\$14.90	\$0.00	\$48.08
	05/01/2018	\$23.61	\$10.00	\$14.90	\$0.00	\$48.51
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
IRE ALARM INSTALLER LECTRICIANS LOCAL 103	03/01/2016	\$46.17	\$13.00	\$16.39	\$0.00	\$75.56
For apprentice rates see "Apprentice- ELECTRICIAN"						
IRE ALARM REPAIR / MAINTENANCE / COMMISSIONING ELECTRICIANS	03/01/2016	\$34.63	\$13.00	\$14.55	\$0.00	\$62.18
OCAL 103 For apprentice rates see "Apprentice-TELECOMMUNICATIONS TECHNICIAN"						
IREMAN (ASST. ENGINEER)	06/01/2016	\$36.71	\$10.00	\$15.15	\$0.00	\$61.86
PERATING ENGINEERS LOCAL 4	12/01/2016	\$37.75	\$10.00	\$15.15	\$0.00	\$62.90
	06/01/2017	\$38.59	\$10.00	\$15.15	\$0.00	\$63.74
	12/01/2017	\$39.42	\$10.00	\$15.15	\$0.00	\$64.57
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
LAGGER & SIGNALER	06/01/2016	\$20.50	\$7.45	\$13.55	\$0.00	\$41.50
ABORERS - ZONE I	12/01/2016	\$20.50	\$7.45	\$13.55	\$0.00	\$41.50
For apprentice rates see "Apprentice- LABORER"						
LOORCOVERER LOORCOVERERS LOCAL 2168 ZONE I	03/01/2016	\$42.13	\$9.80	\$17.62	\$0.00	\$69.55

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Effective Date Base Wage Health Pension Supplemental Total Rate Unemployment

1 2 3 4 5 6 7	50 55 60 65 70 75	\$19.51 \$21.46 \$23.41 \$25.36 \$27.31 \$29.26	\$7.85 \$7.85 \$7.85 \$7.85 \$7.85	\$0.00 \$3.66 \$3.99 \$4.32 \$14.11	\$0.00 \$0.00 \$0.00 \$0.00	\$27.36 \$32.97 \$35.25 \$37.53	
3 4 5 6	60 65 70 75 80	\$23.41 \$25.36 \$27.31 \$29.26	\$7.85 \$7.85 \$7.85	\$3.99 \$4.32	\$0.00 \$0.00	\$35.25	
4 5 6 7	65 70 75 80	\$25.36 \$27.31 \$29.26	\$7,85 .\$7.85	\$4.32	\$0.00		
5 6 7	70 75 80	\$27.31 \$29.26	\$7.85			\$37.53	
6 7	75 80	\$29.26		\$14.11			
7	80			911.11	\$0.00	\$49.27	
			\$7.85	\$14.44	\$0.00	\$51.55	
8	0.0	\$31.21	\$7.85	\$14.77	\$0.00	\$53.83	
	90	\$35.11	\$7.85	\$15.44	\$0.00	\$58.40	
Effectiv	ve Date - 07/01/2016				Supplemental		
Step	percent	Apprentice Base Wage	Health	Pension	Unemployment	Total Rate	
1	50	\$19.98	\$7.85	\$0.00	\$0.00	\$27.83	
2	55	\$21.98	\$7.85	\$3.66	\$0.00	\$33,49	
3	60	\$23.98	\$7.85	\$3.99	\$0.00	\$35.82	
4	65	\$25.97	\$7.85	\$4.32	\$0.00	\$38.14	
5	70	\$27.97	\$7.85	\$14.11	\$0.00	\$49.93	
6	75	\$29.97	\$7.85	\$14.44	\$0.00	\$52.26	
7	80	\$31.97	\$7.85	\$14.77	\$0.00	\$54.59	
8	90	\$35.96	\$7.85	\$15.44	\$0.00	\$59.25	
Notes:							
	Steps are 750 hrs.					į	
Appren	tice to Journeyworker Ratio:1:1						
		06/01/2010	\$44.23	\$10.00	\$15.15	\$0.00	\$69.38
ERS LO	CAL #	12/01/2016	\$45,48	\$10.00	\$15.15	\$0.00	\$70.63
		06/01/2017	7 \$46.48	\$10.00	\$15.15	\$0.00	\$71.63
3 4 5 6 7 8	otes:	frective Date - 07/01/2016 tep percent 50 2 55 60 6 65 70 6 75 7 80 8 90 fotes: Steps are 750 hrs.	Solution Continue Continue	### Apprentice Base Wage Health	### Apprentice Base Wage Health Pension	Supplemental Pension Supplemental Pension Unemployment	Apprentice Base Wage Health Pension Supplemental Unemployment Total Rate

Classification

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Total Rate

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Classification		Effective Da	te Base Wag	e Health		Supplemental Unemployment	Total Rat
HVAC MECHANIC		03/01/2016	\$49.19	\$9.70	\$18.14	\$0.00	\$77.03
PIPEFITTERS LOCAL 537		09/01/2016	\$50.19	\$9.70	\$18,14	\$0.00	\$78.03
-		03/01/2017	\$51.19	\$9.70	\$18.14	\$0.00	\$79.03
	Apprentice- PIPEFITTER" or "PLUMBER/PIP	EFITTER"					
HYDRAULIC DRILLS LABORERS - ZONE I	,	06/01/2016	\$36.85	\$7.45	\$13.55	\$0.00	\$57.85
	ti LABORERS	12/01/2016	\$37.85	\$7.45	\$13.55	\$0.00	\$58.85
For apprentice rates see ". INSULATOR (PIPES &					***		•
HEAT & FROST INSULATOR		09/01/2015		\$11.50	\$13.80	\$0.00	\$69.11
		09/01/2016		\$11.50	\$13.80	\$0.00	\$71.11
	•	09/01/2017		\$11.50	\$13.80	\$0.00	\$73.11
		09/01/2018		\$11.50	\$13.80	\$0.00	\$75.36
		09/01/2019	\$52.56	\$11.50	\$13.80	\$0.00	\$77.86
Step 1	percent 50	Apprentice Base Wage \$21.91	Health \$11.50	Pension \$10.05	Supplemental Unemployment \$0.00	Total Rate	
	-						
2	60	\$26.29	\$11.50	\$10.80	\$0.00		
3	70	\$30.67	\$11.50	\$11.55	\$0.00		
4	80	\$35.05	\$11.50	\$12.30	\$0.00		
Effectiv Step	ve Date - 09/01/2016 percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment		
1	50	\$22.91	\$11.50	\$10.05	\$0.00	\$44.46	
2	60	\$27.49	\$11.50	\$10.80	\$0.00	\$49.79	
3	70	\$32.07	\$11.50	\$11.55	\$0,00	\$55.12	
4	80	\$36.65	\$11.50	\$12.30	\$0.00	\$60.45	
Notes:	Steps are 1 year			-			
Anpren	tice to Journeyworker Ratio:1:4						
RONWORKER/WELD	ER	03/16/2016	\$43.40	\$7.80	\$20.85	\$0.00	\$72.05
RONWORKERS LOCAL 7 (BC	OSTON AREA)	09/16/2016	,	\$7.80	\$20.85	\$0.00	\$72.70

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09/16/2016

03/16/2017

\$44.05

\$44.65

\$7.80

\$20.85

\$20.85

\$0.00

\$72.70

\$73.30

Арр	rentice - 11	RONWORKER - Local 7 Bo	ston					
	ective Date -	03/16/2016				Supplemental		
Ster	percent		Apprentice Base Wage	Health	Pension	Unemployment	Total Rate	
1	60		\$26.04	\$7.80	\$20.85	\$0.00	\$54.69	
2	70		\$30.38	\$7.80	\$20.85	\$0.00	\$59.03	
3	75		\$32.55	\$7.80	\$20.85	\$0.00	\$61.20	
4	80		\$34.72	\$7.80	\$20.85	\$0.00	\$63.37	
5	85		\$36.89	\$7.80	\$20.85	\$0.00	\$65.54	
6	90		\$39.06	\$7.80	\$20.85	\$0.00	\$67.71	
Effe	ective Date -	09/16/2016				Supplemental		
Step	percent		Apprentice Base Wage	Health	Pension	Unemployment	Total Rate	·
1	60		\$26.43	\$7.80	\$20.85	\$0.00	\$55.08	
2	70		\$30.84	\$7.80	\$20.85	\$0.00	\$59.49	
3	75		\$33.04	\$7.80	\$20.85	\$0.00	\$61.69	
4	80	*	\$35.24	\$7.80	\$20.85	\$0.00	\$63.89	
5	85		\$37.44	\$7.80	\$20.85	\$0.00	\$66.09	
6	90		\$39.65	\$7.80	\$20.85	\$0.00	\$68.30	
Not	 es:							•
1	** Struct	ural 1:6; Ornamental 1:4					j	
Api	orentice to Jo	urneyworker Ratio:**						
	PAVING BR	EAKER OPERATOR	06/01/2016	\$36.35	\$7.45	\$13.55	\$0.00	\$57.35
LABORERS - ZONE 1			12/01/2010	\$37.35	\$7.45	\$13.55	\$0.00	\$58.35
For apprentice rates s	ee "Apprentice-1	LABORER"						
LABORER		,	06/01/2010	5 \$36.10	\$7.45	\$13.55	\$0.00	\$57.10
LABORERS - ZONE 1			12/01/2016	\$37.10	\$7.45	\$13.55	\$0.00	\$58.10

Classification

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	Effecti	ve Date -	06/01/2016				Supplemental		
	Step	percent		Apprentice Base Wage	Health	Pension	Unemployment	Total Rate	
	. 1	60		\$21.66	\$7.45	\$13.55	\$0.00	\$42.66	
	2	70		\$25.27	\$7.45	\$13.55	\$0.00	\$46.27	
	3	80		\$28.88	\$7.45	\$13.55	\$0.00	\$49.88	
	4	90		\$32.49	\$7.45	\$13.55	\$0.00	\$53.49	
	Effecti	ve Date -	12/01/2016				Supplemental		
	Step	percent		Apprentice Base Wage	Health	Pension	Unemployment	Total Rate	
	i	60		\$22.26	\$7.45	\$13.55	\$0.00	\$43.26	
	2	70		\$25.97	\$7.45	\$13.55	\$0.00	\$46.97	
	3	80		\$29.68	\$7.45	\$13.55	\$0.00	\$50.68	
	4	90		\$33.39	\$7.45	\$13.55	\$0.00	\$54.39	
	Notes:								
								1	
	Appre	ntice to Jou	rneyworker Ratio:1:5	. — — — — -					
	: CARPENT	ER TENDI	ER	06/01/2016	\$36.10	\$7.45	\$13.55	\$0.00	\$57.10
BORERS - Z	ONE I			12/01/2016	\$37.10	\$7.45	\$13.55	.\$0.00	\$58.10
	ntice rates see "								
ABORER: BORERS - Z	CEMENT	FINISHER	TENDER	06/01/2016	\$36.10	\$7.45	\$13.55	\$0.00	\$57.10
				12/01/2016	\$37.10	\$7.45	\$13.55	\$0.00	\$58.10
	ntice rates see "		ABORER" TE/ASBESTOS REMOVER				***		
BORERS - Z		JUS WASI	IE/ASBESTOS KEMOVEK	12/01/2015	\$35,50	\$7.45	\$13,55	\$0.00	\$56.50
For apprer	ntice rates see *	Apprentice- L.	ABORER"						
	MASON T	ENDER		06/01/2016	\$36.35	\$7.45	\$13.55	\$0.00	\$57.35
BORERS - Z	ONE I			12/01/2016	\$37.35	\$7.45	\$13.55	\$0.00	\$58.35
For apprer	ntice rates see "	Apprentice- L.	ABORER"						
ABORER:	MULTI-TI	RADE TEN	DER	06/01/2016	\$36.10	\$7.45	\$13.55	\$0.00	\$57.10
				12/01/2016	\$37.10	\$7.45	\$13.55	\$0.00	\$58.10
	ntice rates see "		ABORER"						,
ABORER: BORERS - Z	TREE REN ONE 1	MOVER		06/01/2016	• • • • • • • • • • • • • • • • • • • •	\$7.45	\$13.55	\$0.00	\$57.10
This classi	ification applie		rk associated with the removal of st		removal of branc			\$0.00 t done for	\$58.10
	ompany for the AM OPERA		eration, maintenance or repair of util		·			60.00	
BORERS - Z		II VIK		06/01/2016		\$7.45	\$13.55	\$0.00	\$57.35
For apprer	ntice rates see "	Apprentice- L.	ABORER"	12/01/2016	\$37.35	\$7.45	\$13.55	\$0.00	\$58.35
	tile fin			02/01/2016	\$38.08	\$10.18	\$17.70	\$0.00	\$65.96
	S LOCAL 3 - M		E .	08/01/2016		\$10.18	\$17.78	\$0.00	\$66.74
				00/01/2010	330.70	910.10	Ψ17.70	40.00	900.74

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Effect	ive Date -	02/01/2010				Supplemental		
Step	percent		Apprentice Base Wage	Health	Pension	Unemployment	Total Rate	
1	50		\$19.04	\$10.18	\$17.70	\$0.00	\$46.92	
2	60		\$22.85	\$10.18	\$17.70	\$0.00	\$50.73	
3	70		\$26.66	\$10.18	\$17.70	\$0.00	\$54.54	
4	80		\$30.46	\$10.18	\$17.70	\$0.00	\$58.34	
5	90		\$34.27	\$10.18	\$17.70	\$0.00	\$62.15	
Effect Sten	ive Date -	08/01/2016	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate	

Effect	ive Date -	08/01/2016				Supplemental	
Step	percent		Apprentice Base Wage	Health	Pension	Unemployment	Total Rate
1	50		\$19.39	\$10.18	\$17.78	\$0.00	\$47.35
2	60		\$23.27	\$10.18	\$17.78	\$0.00	\$51.23
3	70		\$27.15	\$10.18	\$17.78	\$0.00	\$55.11
4	80		\$31.02	\$10.18	\$17.78	\$0.00	\$58.98
5	90		\$34.90	\$10.18	\$17.78	\$0.00	\$62.86

Apprentice to Journeyworker Ratio:1:3	

MARBLE MASONS, TILELA YERS & TERRAZZO MECH	02/01/2016	\$49.90	\$10.18	\$19.14	\$0.00	\$79.22
BRICKLAYERS LOCAL 3 - MARBLE & TILE	08/01/2016	\$50.80	\$10.18	\$19.22	\$0.00	\$80.20
	02/01/2017	\$51.37	\$10.18	\$19.22	\$0.00	\$80.77

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	Effecti Step	ve Date - percent	02/01/2016	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate	
	1	50		\$24.95	\$10.18	\$19,14	\$0.00	\$54.27	
	2	60		\$29.94	\$10.18	\$19.14	\$0.00	\$54.27 \$59.26	
	3	70		\$34.93	\$10.18	\$19.14	\$0.00	\$64.25	
	4	80		\$34.93 \$39.92	\$10.18	\$19.14	\$0.00	\$69.24	
	5	90		\$39.92 \$44.91	\$10.18	\$19.14	\$0.00	\$74.23	
	Effecti	ve Date -	08/01/2016		•				
	Step	percent	*****	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate	
	1	50	· ·	\$25.40	\$10.18	\$19.22	\$0.00	\$54.80	
	2	60		\$30.48	\$10:18	\$19.22	\$0.00	\$59.88	
	3	70		\$35.56	\$10.18	\$19.22	\$0.00	\$64.96	
	4	80		\$40.64	\$10.18	\$19.22	\$0.00	\$70.04	
	5	90		\$45.72	\$10.18	\$19.22	\$0.00	\$75.12	
	Notes:								
	<u> </u>		. <u> </u>						
			neyworker Ratio:1:5						
	EEPER OP		N CONST. SITES)	06/01/201	6 \$43.81	\$10.00	\$15.15	\$0.00	\$68.96
BIOTENO E	NOINEERS L	CAL 4		12/01/201	6 \$45.04	\$10.00	\$15.15	\$0.00	\$70.19
				06/01/201	7 \$46.03	\$10.00	\$15.15	\$0.00	\$71.18
For appren	tice rates see *	Apprentice- OP	ERATING ENGINEERS"	12/01/201	7 \$47.02	2 \$10.00	\$15.15	\$0.00	\$72.17
	S MAINTI			06/01/201	6 \$43.81	\$10.00	\$15.15	\$0.00	\$68.96
ERATING E	NGINEERS LO	OCAL 4		12/01/201	6 \$45.04	\$10.00	\$15,15	\$0.00	\$70.19
				06/01/201	7 \$46.03	\$10.00	\$15.15	\$0.00	\$71.18
				12/01/201	7 \$47.02	\$10.00	\$15.15	\$0.00	\$72.17
			ERATING ENGINEERS"				*****		
ILLWRIGHT (Zone 1) LLWRIGHTS LOCAL 1121 - Zone 1			04/01/201	5 \$37.64	\$9.80	\$16.21	\$0.00	\$63.65	

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		ntice - MILLWRIGHT - Local 112	l Zone I						
	Step	ve Date - 04/01/2015 percent	Apprentice Base Wa	age :	Health	Pension	Supplemental Unemployment	Total Rate	
	1	55	\$20.70		\$9.80	\$4.48	\$0.00	\$34.98	
	2	65	\$24.47		\$9.80	\$13.36	\$0.00	\$47.63	
	3	75	\$28.23		\$9.80	\$14.18	\$0.00	\$52.21	
	4	85	\$31.99		\$9.80	\$14.99	\$0.00	\$56.78	
	Notes:			— -					
	L	Steps are 2,000 hours							
		ntice to Journeyworker Ratio:1:5							
MORTAR MI. Laborers - zon			06/01/2	2016	\$36,35	\$7.45	\$13.55	\$0.00	\$57.35
		'Apprentice- LABORER"	12/01/	2016	\$37.35	\$7.45	\$13.55	\$0.00	\$58.35
•		TRUCK CRANES, GRADALLS)	06/01/2	2016	\$22.41	\$10.00	\$15,15	\$0.00	\$47.56
OPERATING ENG	HNEERS LO	OCAL 4	12/01/2	2016	\$23.06	\$10.00	\$15.15	\$0.00	\$48.21
			06/01/2	2017	\$23.57	\$10.00	\$15.15	\$0.00	\$48.72
For apprentic	e rates see "	Apprentice- OPERATING ENGINEERS"	12/01/	2017	\$24.09	\$10.00	\$15.15	\$0.00	\$49.24
OILER (TRUC	CK CRAN	NES, GRADALLS)	06/01/7	2016	\$26.29	\$10,00	\$15.15	\$0.00	\$51.44
OPERATING ENG	INEERS LO	OCAL 4	12/01/2	2016	\$27.04	\$10.00	\$15.15	\$0.00	\$52.19
			06/01/2	2017	\$27.64	\$10.00	\$15.15	\$0.00	\$52,79
For apprentic	e rates see "	Apprentice- OPERATING ENGINEERS"	12/01/2	2017	\$28.25	\$10.00	\$15.15	\$0.00	\$53.40
		'EN EQUIPMENT - CLASS II	06/01/2	2016	\$43.81	\$10.00	\$15.15	\$0.00	\$68.96
OPERATING ENG	INEERS LO	OCAL 4	12/01/2	2016	\$45.04	\$10.00	\$15.15	\$0.00	\$70.19
			06/01/2	2017	\$46.03	\$10.00	\$15.15	\$0.00	\$71.18
P	-	A	12/01/2	2017	\$47.02	\$10.00	\$15.15	\$0.00	\$72.17
		'Apprentice- OPERATING ENGINEERS"	01/04/6		210.51	****	61610	60.00	070.16
	AINTER (BRIDGES/TANKS) AINTERS LOCAL 35 - ZONE 2			2016	\$49.51		\$16.10	\$0.00	\$73.46
			07/01/2		\$50.46		\$16.10	\$0.00	\$74.41
			01/01/2	2017	\$51,41	\$7.85	\$16.10	\$0.00	\$75,36

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Classification Effective Date Base Wage Health Pension Supplemental Unemployment Total Rate

		re Date -	01/01/2016				Supplemental		
<u>s</u>	tep	percent		Apprentice Base Wage	Health	Pension	Unemployment	Total Rate	
1	l	50		\$24.76	\$7.85	\$0.00	\$0.00	\$32.61	
2	2	55		\$27.23	\$7.85	\$3.66	\$0.00	\$38.74	
3	3	60		\$29.71	\$7.85	\$3.99	\$0.00	\$41.55	
4	4	65		\$32.18	\$7.85	\$4.32	\$0.00	\$44.35	
	5	70		\$34.66	\$7.85	\$14.11	\$0.00	\$56.62	
6	6	75		\$37.13	\$7.85	\$14.44	\$0.00	\$59.42	
7	7	80		\$39.61	\$7.85	\$14.77	\$0.00	\$62.23	
8	8	90		\$44.56	\$7.85	\$15.44	\$0.00	\$67.85	
	Effectiv	ve Date -	07/01/2016	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate	
1		50		\$25.23	\$7.85	\$0.00	\$0.00	\$33.08	
2	2	55		\$27.75	\$7.85	\$3.66	\$0.00	\$39.26	
3	3	60		\$30.28	\$7.85	\$3.99	\$0.00	\$42.12	
4	4	65		\$32.80	\$7.85	\$4.32	\$0.00	\$44.97	
5	5	70		\$35.32	\$7.85	\$14.11	\$0.00	\$57.28	
	6	75		\$37.85	\$7.85	\$14.44	\$0.00	\$60.14	
7	7	80		\$40.37	\$7.85	\$14.77	\$0.00	\$62.99	
8	8	90		\$45.41	\$7.85	\$15.44	\$0.00	\$68.70	
įN	– – Votes:		_ <i></i>						
1		Steps are	750 hrs.					.	
Ā	pprei	itice to Joi	ırneyworker Ratio:1:1						
•	R (SPRAY OR SANDBLAST, NEW) *			01/01/201	6 \$40.41	\$7.85	\$16.10	\$0.00	\$64.36
	6 or more of surfaces to be painted are new construction, aint rate shall be used. PAINTERS LOCAL 35 - ZONE 2		07/01/201	6 \$41.36	\$7.85	\$16.10	\$0.00	\$65.31	
рани таке зн	an oc	uocu.FAINI	END DUCAL 33 - ZUMB 2	01/01/201	7 \$42.3	\$7.85	\$16.10	\$0.00	\$66.26

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		ve Date - 01/01/2016	A	TT1sh	Di	Supplemental Unemployment	Tatal Data	
	Step	percent	Apprentice Base Wage		Pension		Total Rate	
	1	50	\$20.21	\$7.85	\$0.00	\$0.00	\$28.06	
	2	55	\$22.23	\$7.85	\$3.66	\$0.00	\$33.74	
	3	60	\$24.25	\$7.85	\$3.99	\$0.00	\$36.09	
	4	65	\$26.27	\$7.85	\$4.32	\$0.00	\$38.44	
	5	70	\$28.29	\$7.85.	\$14.11	\$0.00	\$50.25	
	6	75	\$30.31	\$7.85	\$14.44	\$0.00	\$52.60	
	7	80	\$32.33	\$7.85	\$14.77	\$0.00	\$54.95	
	8	90	\$36.37	\$7.85	\$15.44 •	\$0.00	\$59,66	
	Effecti Step	ve Date - 07/01/2016	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate	
	1	50	\$20.68	\$7.85	\$0.00	\$0:00	\$28.53	
	2	55	\$22.75	\$7.85	\$3.66	\$0.00	\$34.26	
	3	60	\$24.82	\$7.85	\$3.99	\$0.00	\$36.66	
	4	65	\$26,88	\$7.85	\$4.32	\$0.00	\$39.05	
	5	70	\$28.95	\$7.85	\$14.11	\$0.00	\$50.91	
	6	75	\$31.02	\$7.85	\$14,44	\$0.00	\$53.31	
	7	80	\$33.09	\$7.85	\$14.77	\$0.00	\$55.71	
	8	90	\$37.22	\$7.85	\$15.44	\$0.00	\$60,51	
	Notes:	. — — — — — — —						
		Steps are 750 hrs.		•				
	Appre	ntice to Journeyworker Ratio:1:1						
		SANDBLAST, REPAINT)	01/01/201	6 \$38,47	\$7.85	\$16.10	\$0.00	\$62.42
NTERS LOCAL	. 35 - ZONE	32	07/01/201	6 \$39.42	\$7.85	\$16.10	\$0.00	\$63,37
			01/01/201	7 \$40,37	\$7.85	\$16.10	\$0.00	\$64.32

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Classification Effective Date Base Wage Health Pension Supplemental Unemployment Total Rate

	ve Date -	01/01/2016	Apprentice Base Wage	TT145-	Pension	Supplemental Unemployment	Total Rate	
Step	percent							
1	50		\$19.24	\$7.85	\$0.00	\$0.00	\$27.09	
2	55		\$21.16	\$7.85	\$3.66	\$0.00	\$32.67	
3	60		\$23.08	\$7.85	\$3.99	\$0.00	\$34.92	
4	65	•	\$25.01	\$7.85	\$4.32	\$0.00	\$37.18	
5	70		\$26.93	\$7.85	\$14.11	\$0.00	\$48.89	
6	75		\$28.85	\$7.85	\$14.44	\$0.00	\$51.14	
7	80		\$30.78	\$7.85	\$14.77	\$0.00	\$53.40	
8	90		\$34.62	\$7.85	\$15.44	\$0.00	\$57.91	•
Effectiv Step	ve Date -	07/01/2016	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate	
1	50		\$19.71	\$7.85	\$0.00	\$0.00	\$27.56	
2	55		\$21.68	\$7.85	\$3.66	\$0.00	\$33.19	
3	60		\$23.65	\$7.85	\$3.99	\$0.00	\$35.19 \$35.49	
4	65				\$4.32	\$0.00		
5	70		\$25.62	\$7.85			\$37.79	
6	70 75		\$27.59	\$7.85	\$14.11	\$0.00	\$49.55	
7			\$29.57	\$7.85	\$14.44	\$0.00	\$51.86	
	80		\$31.54	\$7.85	\$14.77	\$0.00	\$54.16	
8	90		\$35.48	\$7.85	\$15.44	\$0.00	\$58.77	
Notes:								
!	Steps are	/50 hrs.					j	
Appre	tice to Jo	urneyworker Ratio:1:1						
AINTER (TRAFFIC M	IARKING	S)	06/01/2010	5 \$36.10	\$7.45	\$13.55	\$0.00	\$57.10
ABORERS - ZONE 1			12/01/2016	\$37.10	\$7.45	\$13.55	\$0.00	\$58.10
	r Apprentice rates see "Apprentice- LABORER"							
	TER / TAPER (BRUSH, NEW) * Own more of surfaces to be painted are new construction,		01/01/2010	\$39.01	\$7.85	\$16.10	\$0.00	\$62.96
	W paint rate shall be used. PAINTERS LOCAL 35 - ZONE 2		07/01/2010	\$39.96	\$7.85	\$16.10	\$0.00	\$63.91
5 in paint the shan of about militare to chart-		01/01/201	7 \$40.91	\$7.85	\$16.10	\$0.00	\$64.86	

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Step	ctive Date - 01/01/2016 percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate	
1	50	\$19.51	\$7.85	\$0.00	\$0.00	\$27.36	
. 2	55	\$21.46	\$7.85	\$3.66	\$0.00	\$32.97	
. 3	60	\$23.41	\$7.85	\$3.99	\$0.00	\$35.25	
4	65	\$25.36	\$7.85	\$4.32	\$0.00	\$37.53	
5	70	\$27.31	\$7.85	\$14.11	\$0.00	\$49.27	
6	75	\$29.26	\$7.85	\$14.44	\$0.00	\$51.55	
7	80	\$31.21	\$7.85	\$14.77	\$0.00	\$53.83	
8	90	\$35.11	\$7.85	\$15.44	\$0.00	\$58.40	
Effe Step	ctive Date - 07/01/2016	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate	
1	50	\$19.98	\$7.85	\$0.00	\$0.00	\$27.83	
2	55	\$21.98	\$7.85	\$3.66	\$0.00	\$33.49	
3	60	\$23.98	\$7.85	\$3.99	\$0.00	\$35.82	
4	65	\$25.97	\$7.85	\$4.32	\$0.00	\$38.14	
5	70	\$27.97	\$7.85	\$14.11	\$0.00	\$49.93	
6	75	\$29.97	\$7.85	\$14.44	\$0.00	\$52.26	
7	80	\$31.97	\$7.85	\$14.77	\$0.00	\$54.59	
8	90	\$35.96	\$7.85	\$15.44	\$0.00	\$59.25	
Note							
	Steps are 750 hrs.					,	
App	rentice to Journeyworker Rati	o:1:1 — — — — — —					
	BRUSH, REPAINT)	01/01/2016	\$37.07	\$7.85	\$16.10	\$0.00	\$61.02
RS LOCAL 35 - ZO	INE 2	07/01/2016	\$38.02	\$7.85	\$16.10	\$0.00	\$61.97
		01/01/2017	\$38.97	\$7.85	\$16.10	\$0.00	\$62.92

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Step	ve Date - 01/01/2016 · percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate	
1	50	\$18.54	\$7.85	\$0.00	\$0.00	\$26.39	
2	55	\$20.39	\$7.85	\$3.66	\$0.00	\$31.90	
3	60	\$22.24	\$7.85	\$3.99	\$0.00	\$34.08	
4	65	\$24.10	\$7.85	\$4.32	\$0.00	\$36.27	
5	70	\$25.95	\$7.85	\$14.11	\$0.00	\$47.91	
6	75	\$27.80	\$7.85	\$14.44	\$0.00	\$50.09	
7	80	\$29.66	\$7.85	\$14.77	\$0.00	\$52.28	
8	90	\$33.36	\$7.85	\$15.44	\$0.00	\$56.65	
Effecti Step	ve Date - 07/01/2016	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate	
• 1	50	\$19.01	\$7.85	\$0.00	\$0,00	\$26.86	
2	55	\$20.91	\$7.85	\$3.66	\$0.00	\$32.42	
3	60	\$22.81	\$7.85	\$3.99	\$0.00	\$34.65	
4	65	\$24.71	\$7.85	\$4.32	\$0.00	\$36.88	
5	70	\$26.61	\$7.85	\$14.11	\$0.00	\$48.57	
6	75	\$28.52	\$7.85	\$14.44	\$0.00	\$50.81	
7	80	\$30.42	\$7.85	\$14.77	\$0.00	\$53.04	
8	90	\$34.22	\$7.85	\$15.44	\$0.00	\$57.51	
Notes:	Steps are 750 hrs.	·					
Appre	ntice to Journeyworker Ratio:1:1						
EL & PICKUP TR		06/01/2016	\$33.08	\$10.41	\$10.08	\$0.00	\$53.57
STERS JOINT COUNC	L NO. 10 ZONE A	08/01/2016	\$33.08	\$10.91	\$10.08	\$0.00	\$54.07
		12/01/2016	\$33.08	\$10.91	\$10.89	\$0.00	\$54.88
K) driver local 56 (zo	AND DOCK CONSTRUCTOR (UNDERPINNING ANI) **********************************		\$42.04	\$9.80	\$19.23	\$0.00	\$71.07
DRIVER		08/01/2015	\$42.04	\$9.80	\$19.23	\$0.00	\$71.07

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ELAYER ORERS - ZON For apprentice		Apprentice- L	ABORER"	06/01/2016 12/01/2016		\$7.45 \$7.45	\$13.55 \$13.55	\$0.00 \$0.00	\$57.35 \$58,35
DI LICO	Apprei	ttice to Jo	ırneyworker Ratio:**						
	Notes:	Refrig/A	15; 1:10 thereafter / Steps a		7;9:20;10:23(N	Max)			
	5	80		\$40.15	\$9.70	\$18.14	\$0.00	\$67.99	
	4	70		\$35.13	\$9.70	\$18.14	\$0.00	\$62.97	
	3	60		\$30.11	\$9.70	\$18.14	\$0.00	\$57.95	
	2	45		\$22.59	\$9.70	\$18.14	\$0.00	\$50.43	
	1	40		\$20.08	\$9.70	\$7.50	\$0.00	\$37.28	
	Effection Step	ve Date - percent	09/01/2016	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate	
	5	80		\$39.35	\$9.70	\$18.14	\$0.00	\$67.19	
	4	70		\$34.43	\$9.70	\$18.14	\$0.00	\$62.27	
	3	60		\$29.51	\$9.70	\$18.14	\$0.00	\$57.35	
	2	45		\$22.14	\$9.70	\$18.14	\$0.00	\$49.98	
	1	40		\$19.68	\$9.70	\$7.50	\$0.00	\$36.88	
	Step	percent		Apprentice Base Wage	Health	Pension	Unemployment	Total Rate	
		itice - Pl ve Date -	PEFITTER - Local 537 03/01/2016				Supplemental		
				03/01/201		\$9.70	\$18.14	\$0.00	\$79.03
EFITTERS LO	CAL 537.			09/01/2010		\$9.70	\$18.14	\$0.00	\$78.03
PEFITTER &	& STEAN			03/01/2010	5 \$49.19	\$9.70	\$18,14	\$0.00	\$77.03
	Apprei	ntice to Jo	urneyworker Ratio:1:3						
	Notes:								
	8	90		\$37.84	\$9.80	\$19.23	\$0.00	\$66.87	
	7	90		\$37.84	\$9.80	\$19.23	\$0.00	\$66.87	
	6	80		\$33.63	\$9.80	\$19.23	\$0.00	\$62.66	
	5	80		\$33.63	\$9.80	\$19.23	\$0.00	\$62.66	
	4	75		\$31.53	\$9,80	\$19.23	\$0.00	\$60.56	
	3	70		\$29.43	\$9.80	\$19.23	\$0.00	\$58.46	
	2	60		\$25.22	\$9.80	\$19.23	\$0.00	\$54.25	
	1	50		\$21.02	\$9.80	\$19.23	\$0.00	\$50.05	
	Step	percent		Apprentice Base Wage	Health	Pension	Unemployment	Total Rate	

FLUMBERS & GASPITTERS 0.9001/2016 \$51.36 \$11.07 \$15.14 \$0.00 \$77.03	Classification					Effective Dat	e Base Wag	e Health		Supplemental Unemployment	Total Rate
Apprentice						03/01/2016	\$51.36	\$11.07	\$15.14	\$0.00	\$77.57
Apprentice - PLUMBERGASFITTER - Local 12 Effective Date - 03/01/2016 Step percent Apprentice Base Wage Health Pension Unemployment Total Rate	CMDERG & OA	orn ieno	LOCAL 12			09/01/2016	\$52.41	\$11.07	\$15.14	\$0.00	\$78.62
Part						03/01/2017	\$53.41	\$11.07	\$15.14	\$0.00	\$79.62
Step		Appre	ntice - PLUM	BER/GASFITTER - Loca	l 12						
1 35 \$17.98 \$11.07 \$5.63 \$0.00 \$34.68 2 40 \$20.54 \$11.07 \$6.37 \$0.00 \$37.98 3 55 \$28.25 \$11.07 \$8.56 \$0.00 \$37.98 4 65 \$33.38 \$11.07 \$10.03 \$0.00 \$54.48 5 75 \$38.52 \$11.07 \$11.48 \$0.00 \$54.48 5 75 \$38.52 \$11.07 \$11.48 \$0.00 \$54.07 Effective Date - 09/01/2016					Annrentice	Rase Wage	Health	Pension			
2 40 \$20.54 \$11.07 \$6.37 \$0.00 \$37.98 3 55 \$28.25 \$11.07 \$8.56 \$0.00 \$47.88 4 65 \$33.38 \$11.07 \$10.03 \$0.00 \$54.48 5 75 \$38.52 \$11.07 \$11.08 \$50.00 \$54.48 65 \$33.38 \$11.07 \$11.08 \$50.00 \$54.48 65 \$33.38 \$11.07 \$11.08 \$50.00 \$54.48 7 86.56 \$0.00 \$54.48 8 9 Percent Apprentice Base Wage Health Pension Unemployment Total Rate 1 35 \$18.34 \$11.07 \$5.63 \$0.00 \$35.04 2 40 \$20.96 \$11.07 \$6.36 \$0.00 \$38.39 3 55 \$28.83 \$11.07 \$8.55 \$0.00 \$38.39 3 55 \$28.83 \$11.07 \$8.55 \$0.00 \$348.45 4 65 \$34.07 \$11.07 \$10.02 \$0.00 \$55.16 5 75 \$39.31 \$11.07 \$11.48 \$0.00 \$55.16 Notes:											
Sept Sign											
A 65 S33.38 S11.07 S10.03 S0.00 S54.48											
Effective Date											
Step											
Notes:		Effect	ive Date - 09	/01/2016					Supplemental		
\$2		Step	percent		Apprentice	Base Wage	Health	Pension			
\$ \$28.83 \$11.07 \$8.55 \$0.00 \$48.45\$\$ 4 65 \$34.07 \$11.07 \$10.02 \$0.00 \$55.16\$\$ 5 75 \$39.31 \$11.07 \$11.48 \$0.00 \$61.86\$\$ Notes:		1	35		\$	18.34	\$11.07	\$5.63	\$0.00	\$35.04	
# 65		2	40		\$	20.96	\$11.07	\$6.36	\$0.00	\$38.39	
Notes:		3	55		\$	28.83	\$11.07	\$8.55	\$0.00	\$48.45	
Notes: Step4 with lic\$57.78 Step5 with lic\$64.37		4	65		\$	34.07	\$11.07	\$10.02	\$0.00	\$55.16	
** 1:2; 2:6; 3:10; 4:14; 5:19/Steps are 1 yr Step4 with lic\$57.78 Step5 with lic\$64.37 Apprentice to Journeyworker Ratio: ** EUMATIC CONTROLS (TEMP.) ### 12:2; 2:6; 3:10; 4:14; 5:19/Step5 with lic\$64.37		5	75		\$	39.31	\$11.07	\$11.48	\$0.00	\$61.86	
** 1:2; 2:6; 3:10; 4:14; 5:19/Steps are 1 yr		Notes:									
SEUMATIC CONTROLS (TEMP.) 03/01/2016 \$49.19 \$9.70 \$18.14 \$0.00 \$77.03			** 1:2; 2:6; 3: Step4 with lic	\$57.78 Step5 with lic\$64.					·		
### DWER SHOVEL/DERRICK/TRENCHING MACHINE ### Defoil ##	EUMATIC (•		02/01/2016	\$40.10	\$0.70	\$19.14	\$0.00	622.02
Solution State S			, , , , , ,				•				
For apprentice rates see "Apprentice-PPEFITTER" or "PLUMBER/PIPEFITTER"											
For apprentice rates see "Apprentice- LABORER" WDERMAN & BLASTER O6/01/2016 \$37.10 \$7.45 \$13.55 \$0.00 \$58.10 \$0.00 \$58.10 \$0.00 \$59.10 \$0.00 \$15.15 \$0.00 \$69.38 \$0.00 \$0.00 \$1	For apprentice	rates see '	Apprentice- PIPEF	ITTER" or "PLUMBER/PIPEFI	TTER"	05/01/2017	ψ01,17	92.70	******	40.00	\$15.05
For apprentice rates see "Apprentice- LABORER" **MODERMAN & BLASTER** **MODERMAN & BLASTER** **MOMERMAN & BLASTER* **MOMERMAN &			TOOL OPERA	ror		06/01/2016	\$36.35	\$7.45	\$13.55	\$0.00	\$57.35
### DEFINITION OF STATES 106/01/2016 \$37.10 \$7.45 \$13.55 \$0.00 \$58.10 \$12/01/2016 \$38.10 \$7.45 \$13.55 \$0.00 \$59.10 \$12/01/2016 \$38.10 \$7.45 \$13.55 \$0.00 \$59.10 \$15.15 \$0.00 \$59.10 \$15.15 \$0.00 \$15			'Anorentice- LABC	RER"		12/01/2016	\$37.35	\$7.45	\$13.55	\$0.00	\$58.35
12/01/2016 \$38.10 \$7.45 \$13.55 \$0.00 \$59.10						06/01/2016	\$37.10	\$7.45	\$13.55	\$0.00	\$58.10
Post apprentice rates see "Apprentice LABORER"	BORERS - ZONE	E 1			*						
12/01/2016 \$45.48 \$10.00 \$15.15 \$0.00 \$70.63	For apprentice	rates see	Apprentice- LABO	RER"							707,10
12/01/2016 \$45.48 \$10.00 \$15.15 \$0.00 \$70.63 06/01/2017 \$46.48 \$10.00 \$15.15 \$0.00 \$71.63 12/01/2017 \$47.48 \$10.00 \$15.15 \$0.00 \$71.63 12/01/2017 \$47.48 \$10.00 \$15.15 \$0.00 \$72.63 Total apprentice operating engineers*				HING MACHINE		06/01/2016	\$44.23	\$10.00	\$15.15	\$0.00	\$69.38
12/01/2017 \$47.48 \$10.00 \$15.15 \$0.00 \$72.63	ERALING ENGL	uveers L	NAL 4			12/01/2016	\$45.48	\$10.00	\$15.15	\$0.00	\$70.63
For apprentice or Tables see "Apprentice OPERATING ENGINEERS"						06/01/2017	\$46.48	\$10.00	\$15.15	\$0.00	\$71.63
MP OPERATOR (CONCRETE) 06/01/2016 \$44.23 \$10.00 \$15.15 \$0.00 \$69.38 EFAITING ENGINEERS LOCAL 4 12/01/2016 \$45.48 \$10.00 \$15.15 \$0.00 \$70.63 06/01/2017 \$46.48 \$10.00 \$15.15 \$0.00 \$71.63 12/01/2017 \$47.48 \$10.00 \$15.15 \$0.00 \$72.63	For apprentice	rates see	'Apprentice- OPER	ATING ENGINEERS"		12/01/2017	\$47.48	\$10.00	\$15.15	\$0.00	\$72.63
12/01/2016 \$45.48 \$10.00 \$15.15 \$0.00 \$70.63 06/01/2017 \$46.48 \$10.00 \$15.15 \$0.00 \$71.63 12/01/2017 \$47.48 \$10.00 \$15.15 \$0.00 \$72.63	MP OPERA	TOR (C	ONCRETE)			06/01/2016	\$44.23	\$10.00	\$15.15	\$0.00	\$69.38
12/01/2017 \$47.48 \$10.00 \$15.15 \$0.00 \$72.63	KATING ENGI	INEERS LO	OCAL 4			12/01/2016	\$45.48	\$10.00	\$15,15	\$0.00	\$70.63
						06/01/2017	\$46.48	\$10.00	\$15.15	\$0.00	\$71.63
	For apprentice rates see "Apprentice-OPERATING ENGINEERS"				12/01/2017	\$47.48	\$10.00	\$15.15	\$0.00	\$72.63	
· · · · · · · · · · · · · · · · · · ·	* F										

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
PUMP OPERATOR (DEWATERING, OTHER)	06/01/2016	\$30.40	\$10.00	\$15.15	\$0.00	\$55.55
OPERATING ENGINEERS LOCAL 4	12/01/2016	\$31.27	\$10.00	\$15.15	\$0.00	\$56.42
	06/01/2017	\$31.96	\$10.00	\$15.15	\$0.00	\$57.11
For apprentice rates see "Apprentice- OPERATING ENGINEERS"	12/01/2017	\$32.65	\$10.00	\$15.15	\$0.00	\$57.80
READY MIX CONCRETE DRIVERS after 4/30/10	05/01/2016	\$28.03	\$7.98	\$9.31	\$0.00	\$45.32
(Drivers Hired After 4/30/2010) TEAMSTERS LOCAL 25b	07/01/2016	\$28.03	\$8.23	\$9.31	\$0.00	\$45.57
,	05/01/2017	\$28.18	\$8.23	\$9.72	\$0.00	\$46.13
	07/01/2017	\$28.18	\$8.48	\$9.72	\$0.00	\$46.38
READY-MIX CONCRETE DRIVER	05/01/2016	\$29.33	\$7.98	\$9.31	\$0.00	\$46.62
TEAMSTERS LOCAL 25b	07/01/2016	\$29.33	\$8.23	\$9.31	\$0.00	\$46.87
	05/01/2017	\$29.48	\$8.23	\$9.72	\$0.00	\$47.43
	07/01/2017	\$29.48	\$8.48	\$9.72	\$0.00	\$47.68
RECLAIMERS	06/01/2016	\$43.81	\$10.00	\$15.15	\$0.00	\$68.96
OPERATING ENGINEERS LOCAL 4	12/01/2016	\$45.04	\$10.00	\$15.15	\$0.00	\$70.19
	06/01/2017	\$46.03	\$10.00	\$15.15	\$0.00	\$71.18
	12/01/2017	\$47.02	\$10.00	\$15.15	\$0.00	\$72.17
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
RESIDENTIAL WOOD FRAME (All Other Work) CARPENTERS -ZONE 2 (Residential Wood)	04/01/2011	\$24.24	\$8.67	\$15.51	\$0.00	\$48.42
RESIDENTIAL WOOD FRAME CARPENTER ** ** The Residential Wood Frame Carpenter classification applies	05/01/2011	\$24.24	\$6.34	\$6.23	\$0.00	\$36.81

^{**} The Residential Wood Frame Carpenter classification applies

^{2 (}Residential Wood)
As of 9/1/09 Carpentry work on wood-frame residential WEATHERIZATION projects shall be paid the RESIDENTIAL WOOD FRAME CARPENTER rate.

Apprentice -	CARPENTER	(Residential	Wood I	Frame) - Zone 2
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	ive Date - 05/01/2011	Apprentice Base Wage	Licalth	Pension	Supplemental Unemployment	Total Rate
Step	percent	Applemice base wage	Health	rension	Chemployment	1 Otal Nate
1	60	\$14.54	\$6.34	\$0.00	\$0.00	\$20.88
2	60	\$14.54	\$6.34	\$6.23	\$0.00	\$27.11
3	65	\$15.76	\$6.34	\$6.23	\$0.00	\$28.33
4	70	\$16.97	\$6.34	\$6.23	\$0.00	\$29.54
5,	75	\$18.18	\$6.34	\$6.23	\$0.00	\$30.75
6	80	\$19.39	\$6.34	\$6.23	\$0.00	\$31.96
7	85	\$20.60	\$6,34	\$6.23	\$0.00	\$33.17
8	90	\$21.82	\$6.34	\$6.23	\$0.00	\$34.39
Notes	 					
İ						
Appro	entice to Journeyworker Rat	io:1:5				
MOTORIZE	ED BUGGY OPERATOR	06/01/2010	5 \$36.3	35 \$7.45	\$13.55	\$0.00 \$57.35

RIDE-ON MOTORIZED BUGGY OPERATOR	06/01/2016	\$36.35	\$7.45	\$13.55	\$0.00	\$57.35
LABORERS - ZONE I	12/01/2016	\$37.35	\$7.45	\$13.55	\$0.00	\$58.35

For apprentice rates see "Apprentice- LABORER"

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only to the construction of new, wood frame residences that do

not exceed four stories including the basement. CARPENTERS -ZONE

Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
Classification ROLLER/SPREADER/MULCHING MACHINE OPERATING ENGINEERS LOCAL 4 For apprentice rates see "Apprentice- OPERATING ENGINEERS" ROOFER (Inc.Roofer Waterproofing &Roofer Damproofg)	06/01/2016	\$43.81	\$10.00	\$15.15	\$0.00	\$68.96
OPERATING ENGINEERS LOCAL 4	12/01/2016	\$45.04	\$10.00	\$15,15	\$0.00	\$70.19
	06/01/2017	\$46.03	\$10.00	\$15.15	\$0.00	\$71.18
. For apprentice rates see "Apprentice- OPERATING ENGINEERS"	12/01/2017	\$47.02	\$10.00	\$15.15	\$0.00	\$68.96 \$70.19
ROOFER (Inc.Roofer Waterproofing &Roofer Damproofg)	02/01/2016	\$40.11	\$11.00	\$12.90	\$0.00	\$64.01

	ntice - ROOFER - Local 33						1:
Effecti Step	ve Date - 02/01/2016 percent	Apprentice Base Wage	e Wage Health		Supplemental Unemployment	Total Rate	
1	50	\$20.06	\$11.00	\$3.39	\$0.00	\$34.45	
2	60	\$24.07	\$11.00	\$12.90	\$0.00	\$47.97	
3	65	\$26.07	\$11.00	\$12.90	\$0.00	\$49.97	
4	75	\$30.08	\$11.00	\$12.90	\$0.00	\$53.98	
5	85	\$34.09	\$11.00	\$12.90	\$0.00	\$57.99	
	ntice to Journeyworker Ratio: E / PRECAST CONCRETE	02/01/2010	5 \$40.36	\$11.00	\$12.90	\$0.00	\$64.26
For apprentice rates see	'Apprentice- ROOFER"				•		
HEETMETAL WORK		02/01/2016	5 \$43.31	\$10.70	\$21.95	\$2.28	\$78.24
HEETMETAL WORKERS L	OCAL 17 - A	08/01/2010	5 \$44.46	\$10.70	\$21.95	\$2.28	\$79.39
		02/01/201	7 \$45.56	\$10.70	\$21.95	\$2.28	\$80.49
		08/01/201	7 \$46.66	\$10.70	\$21.95	\$2.28	\$81.59
	•	02/01/2013	8 \$47.81	\$10.70	\$21.95	\$2.28	\$82.74

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Classification Effective Date Base Wage Health Pension Supplemental Unemployment Total Rate

Step percent		Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	40	\$17.32	\$10.70	\$4.90	\$0.00	\$32.92
2	40	\$17.32	\$10.70	\$4.90	\$0.00	\$32.92
3	45	\$19.49	\$10.70	\$9.79	\$1.20	\$41.18
4	45	\$19.49	\$10.70	\$9.79	\$1.20	\$41.18
5	50	\$21.66	\$10.70	\$10.65	\$1.29	\$44.30
6	50	\$21.66	\$10.70	\$10.90	\$1.30	\$44.56
7	60	\$25.99	\$10.70	\$12.37	\$1.47	\$50.53
8	65	\$28.15	\$10.70	\$13.24	\$1.56	\$53.65
9	75	\$32.48	\$10.70	\$14.97	\$1.74	\$59.89
10	85	\$36.81	\$10.70	\$16,18	\$1.91	\$65.60
Effect	ive Date - 08/01/2016				Supplemental	
Step percent		Apprentice Base Wage	Health	Pension	Unemployment	Total Rate
1	40	\$17.78	\$10.70	\$4.90	\$0.00	\$33.38
2	40	\$17.78	\$10.70	\$4.90	\$0.00	\$33.38
3	45	\$20.01	\$10.70	\$9.79	\$1.22	\$41.72
4	45	\$20.01	\$10.70	\$9.79	\$1.22	\$41.72
5	50	\$22.23	\$10.70	\$10.65	\$1.31	\$44.89
6	50	\$22.23	\$10.70	\$10.90	\$1,31	\$45.14
7	60	\$26.68	\$10.70	\$12.37	\$1.49	\$51,24
8	65	\$28.90	\$10.70	\$13.24	\$1.59	\$54.43
9	75	\$33.35	\$10.70	\$14.97	\$1.77	\$60.79
10	85	\$37.79	\$10.70	\$16.18	\$1.94	\$66.61
Notes	Steps are 6 mos.					
1						

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Effective Date - 06/01/2013 Step percent	Apprentice Base Wage Health		Pension	Supplemental Unemployment	Total Rate	
1 50	\$12,91	\$7.07	\$0.00	\$0.00	\$19.98	
2 55	\$14.20	\$7.07	\$2.45	\$0.00	\$23.72	•
3 60	\$15.49	\$7.07	\$2.45	\$0.00	\$25.01	
4 65	\$16.78	\$7.07	\$2.45	\$0.00	\$26.30	
5 70	\$18.07	\$7.07	\$7.05	\$0.00	\$32.19	
6 75	\$19.36	\$7.07	\$7.05	\$0.00	\$33.48	
7 80	\$20.65	\$7.07	\$7.05	\$0.00	\$34.77	
8 85	\$21.94	\$7.07	\$7.05	\$0.00	\$36.06	
9 90	\$23.23	\$7.07	\$7.05	\$0.00	\$37.35	
Notes:				·_		
Steps are 4 mos.					1	
Apprentice to Journeyworker Ratio:1:1						
PECIALIZED EARTH MOVING EQUIP < 35 TONS	06/01/2016	\$33.54	\$10.41	\$10.08	\$0.00	\$54.03
AMSTERS JOINT COUNCIL NO. 10 ZONE A	08/01/2016	\$33.54	\$10.91	\$10.08	\$0.00	\$54.53
	12/01/2016	\$33.5	\$10.91	\$10.89	\$0.00	\$55.34
PECIALIZED EARTH MOVING EQUIP > 35 TONS	06/01/2016	\$33.83	\$10.41	\$10.08	\$0.00	\$54.32
AMSTERS JOINT COUNCIL NO. 10 ZONE A	08/01/2016	\$33,83	\$10.91	\$10.08	\$0.00	\$54.82
•	12/01/2016	\$33.83	\$10.91	\$10.89	\$0.00	\$55.63
PRINKLER FITTER	03/01/2016	\$54.43	\$8.67	\$16.80	\$0.00	\$79.90
RINKLER FITTERS LOCAL 550 - (Section A) Zone 1	10/01/2016	\$55.53	\$8.67	\$16.80	\$0.00	\$81.00
	03/01/2017	\$56.53	\$8.67	\$16.80	\$0.00	\$82.00

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Apprentice -	TERRAZZO FINISHER - Local 3 Marble & Tile
Additunce -	TERROLLO PRINTEDIALIC - LOCAL S BIAN OF CLARIC

Effective Date -		02/01/2016		Supplemental							
Step	percent		Apprentice Base Wage	Health	Pension	Unemployment	Total Rate				
1	50		\$24.40	\$10.18	\$19.14	\$0.00	\$53.72				
2	60		\$29.28	\$10.18	\$19.14	\$0.00	\$58.60				
3	70		\$34.16	\$10.18	\$19.14	\$0.00	\$63.48				
4	80		\$39.04	\$10.18	\$19.14	\$0.00	\$68.36				
5	90		\$43.92	\$10.18	\$19.14	\$0.00	\$73.24				

Step	percent	Apprentice Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
1	50	\$24.85	\$10.18	\$19.22	\$0.00	\$54.25
2	60	\$29.82	\$10.18	\$19.22	\$0.00	\$59.22
3	70	\$34.79	\$10.18	\$19.22	\$0.00	\$64.19
4	80	\$39.76	\$10.18	\$19.22	\$0.00	\$69.16
5	90	\$44.73	\$10.18	\$19.22	\$0.00	\$74.13

Apprentice to Journeyworker Ratio:1:3

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Classification	Effective Date	Base Wage	Health	Pension	Supplemental Unemployment	Total Rate
TEST BORING DRILLER	06/01/2016	\$37.45	\$7.45	\$13.75	\$0.00	\$58.65
LABORERS - FOUNDATION AND MARINE	12/01/2016	\$38.45	\$7.45	\$13.75	\$0.00	\$59.65
For apprentice rates see "Apprentice- LABORER"						
TEST BORING DRILLER HELPER LABORERS - FOUNDATION AND MARINE	06/01/2016	\$36.17	\$7.45	\$13.75	\$0.00	\$57.37
	12/01/2016	\$37.17	\$7.45	\$13.75	\$0.00	\$58.37
For apprentice rates see "Apprentice- LABORER"						
TEST BORING LABORER LABORERS - FOUNDATION AND MARINE	06/01/2016	\$36.05	\$7.45	\$13.75	\$0.00	\$57.25
	12/01/2016	\$37.05	\$7.45	\$13.75	\$0.00	\$58.25
For apprentice rates see "Apprentice- LABORER" TRACTORS/PORTABLE STEAM GENERATORS						
OPERATING ENGINEERS LOCAL 4	06/01/2016	\$43.81				
	12/01/2016	\$45.04				
	06/01/2017	\$46.03	\$10.00			\$71.18
Description of the state of the	12/01/2017	\$47.02	\$10.00	\$15.15	\$0.00	\$72.17
For apprentice rates see "Apprentice- OPERATING ENGINEERS" TRAILERS FOR EARTH MOVING EQUIPMENT			***	#10.00		
TRAILERS FOR EARTH MOVING EQUIFMENT TEAMSTERS JOINT COUNCIL NO. 10 ZONE A	06/01/2016	\$34.12				-
	08/01/2016	\$34.12	Realth Pension Unemployment Foundation \$7.45 \$13.75 \$0.00 \$58.65 \$7.45 \$13.75 \$0.00 \$59.65 \$7.45 \$13.75 \$0.00 \$57.37 \$7.45 \$13.75 \$0.00 \$58.37 \$7.45 \$13.75 \$0.00 \$57.25 \$7.45 \$13.75 \$0.00 \$58.25 \$10.00 \$15.15 \$0.00 \$68.96 \$10.00 \$15.15 \$0.00 \$70.19 \$10.00 \$15.15 \$0.00 \$71.18			
	12/01/2016	\$34.12	\$10.91			\$38.65 \$39.65 \$59.65 \$57.37 \$58.37 \$57.25 \$58.25 \$68.96 \$70.19 \$71.18 \$72.17 \$54.61 \$55.11 \$55.92 \$69.93 \$70.93 \$71.93 \$72.93 \$62.00 \$63.00 \$64.00 \$65.00 \$54.53 \$55.34 \$57.35 \$58.35
TUNNEL WORK - COMPRESSED AIR LABORERS (COMPRESSED AIR)	06/01/2016	\$48.33	\$7.45	\$14.15	\$0.00	\$69.93
For apprentice rates see "Apprentice- LABORER"	12/01/2016	\$49.33	\$7.45	\$14.15	\$0.00	\$70.93
TUNNEL WORK - COMPRESSED AIR (HAZ. WASTE)	06/01/2016	\$50.33	\$7.45	\$14.15	\$0.00	\$71.93
LABORERS (COMPRESSED AIR)	12/01/2016	\$51.33	•	\$14.15	\$0.00	
For apprentice rates see "Apprentice- LABORER"						
TUNNEL WORK - FREE AIR	06/01/2016	\$40.40	\$7.45	\$14.15	\$0.00	\$62.00
LABORERS (FREE AIR TUNNEL)	12/01/2016	\$41.40	\$7.45	\$14.15	\$0.00	\$63.00
For apprentice rates see "Apprentice- LABORER"						
TUNNEL WORK - FREE AIR (HAZ. WASTE)	06/01/2016	\$42.40	\$7.45	\$14.15	\$0.00	\$64.00
LABORERS (FREE AIR TUNNEL)	12/01/2016	\$43.40	\$7.45	\$14.15	\$0.00	\$65.00
For apprentice rates see "Apprentice- LABORER"						
VAC-HAUL teamsters joint council no. 10 zone a	06/01/2016	\$33.54	\$10.41	\$10.08	\$0.00	\$54.03
EXMINERATION CONCILING, TO LONE A	08/01/2016	\$33.54	\$10.91	\$10.08	\$0.00	\$54.53
· · · · · · · · · · · · · · · · · · ·	12/01/2016	\$33.54	\$10.91	\$10.89	\$0.00	\$55.34
WAGON DRILL OPERATOR	06/01/2016	\$36.35	\$7.45	\$13.55	\$0.00	\$57.35
LABORERS - ZONE I	12/01/2016	\$37.35	\$7.45	\$13.55	\$0.00	\$58.35
For apprentice rates see "Apprentice- LABORER"						
WASTE WATER PUMP OPERATOR———————————————————————————————————	06/01/2016	\$44.23	\$10.00	\$15.15	\$0.00	\$69.38
OF BRATING ENGINEERS DOCALLY	12/01/2016	\$45.48	\$10.00	\$15.15	\$0.00	\$70.63
	06/01/2017	\$46.48	\$10.00	\$15.15	\$0.00	\$71.63
	12/01/2017	\$47.48	\$10.00	\$15.15	\$0.00	\$72.63
For apprentice rates see "Apprentice- OPERATING ENGINEERS"						
WATER METER INSTALLER PLUMBERS & GASFITTERS LOCAL 12	03/01/2016	\$51.36	\$11.07	\$15.14	\$0.00	\$77.57
LUMBERS & UMSFILLERS LOCAL 12	09/01/2016	\$52.41	\$11.07	\$15.14	\$0.00	\$78.62
	03/01/2017	\$53.41	\$11.07	\$15.14	\$0.00	\$79.62
For apprentice rates see "Apprentice- PLUMBER/PIPEFITTER" or "PLUMBER/GAS	SFITTER"					

Wage Request Number: 20160614-015

Issue Date: 06/14/2016

Project Manual #16-110 – 2016 Citywide Micro-Surfacing of Roadways
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Supplemental Classification **Total Rate** Effective Date Base Wage Health Pension Unemployment

Additional Apprentice Information:

Minimum wage rates for apprentices employed on public works projects are listed above as a percentage of the pre-determined hourly wage rate established by the Commissioner under the provisions of the M.G.L. c. 149, ss. 26-27D. Apprentice ratios are established by the Division of Apprenticeship Training pursuant to M.G.L. c. 23, ss. 11E-11L.

All apprentices must be registered with the Division of Apprenticeship Training in accordance with M.G.L. c. 23, ss. 11E-11L.

All steps are six months (1000 hours.)
Ratios are expressed in allowable number of apprentices to journeymen or fraction thereof, unless otherwise specified.

- Multiple ratios are listed in the comment field.
- ** Multiple ratios are listed in the comment neid.

 *** APP to JM; 1:1, 2:2, 2:3, 3:4, 4:4, 4:5, 4:6, 5:7, 6:8, 6:9, 7:10, 8:10, 8:11, 8:12, 9:13, 10:13, 10:14, etc.

 **** APP to JM; 1:1, 1:2, 2:3, 2:4, 3:5, 4:6, 4:7, 5:8, 6:9, 6:10, 7:11, 8:12, 8:13, 9:14, 10:15, 10:16, etc.

Wage Request Number: 20160614-015 Issue Date: 06/14/2016 Page 33 of 33

The Massachusetts Prevailing Wage Law M.G.L. ch. 149, §§ 26 – 27

NOTICE TO AWARDING AUTHORITIES

- The enclosed wage schedule applies only to the specific project listed at the top and will be updated for any public construction project lasting longer than one (1) year.
- You should request an updated wage schedule from the Division of Occupational Safety if you have not opened bids or selected a contractor within 90 days of the date of issuance of the enclosed wage schedule.
- > The wage schedule shall be incorporated in any advertisement or call for bids for the project for which it has been issued.
- Once a contractor has been selected by the awarding authority, the wage schedule shall be made a part of the contract for that project.

NOTICE TO CONTRACTORS

- > The enclosed wage schedule, and any updated schedule, must be posted in a conspicuous place at the work site during the life of the project.
- The wages listed on the enclosed wage schedule must be paid to employees on public works projects regardless of whether they are employed by the prime contractor, a filed sub-bidder, or any sub-contractor.
- > The enclosed wage schedule applies to all phases of the project including the final clean-up. Contractors whose only role is to perform final clean-up must pay their employees according to this wage schedule.
- All apprentices must be registered with the Massachusetts Division of Apprentice Training in order to be paid at the reduced apprentice rates. If a worker is not registered with the Division of Apprentice Training, they must be paid the "total rate" listed on the wage schedule regardless of experience or skill level. For further information, please call (617) 727-3486 or write to the Division of Apprentice Training, 399 Washington Street, 4th Floor, Boston, MA 02108

WEEKLY PAYROLL RECORDS REPORT & STATEMENT OF COMPLIANCE

In accordance with Massachusetts General Law c149, §27B, a true and accurate record must be kept of all persons employed on the public works project for which the enclosed rates have been provided. A Payroll Form has been printed on the reverse of this page and includes all the information required to be kept by law. Every contractor or subcontractor is required to keep these records and preserve them for a period of three years from the date of completion of the contract.

In addition, every contractor and subcontractor is required to submit a copy of their weekly payroll records to the awarding authority. This is required to be done on a weekly basis. Once collected, the awarding authority is also required to preserve those records for three years.

In addition, each such contractor, subcontractor or public body shall furnish to the Department of Labor & Workforce Development/Division of Occupational Safety within fifteen days after completion of its portion of the work a statement, executed by the contractor, subcontractor or public body who supervises the payment of wages, in the following form:

STATEMENT OF COMPLIANCE

I.	
(Name of signatory party) (Title) do hereby state:	_
That I pay or supervise the payment of the persons employed by	
on the	_
(Contractor, subcontractor or public body) (Building or project) and that all mechanics and apprentices, teamsters, chauffeurs and laborers employed on said project have been paid in accordance with wages determined under the provisions of sections twenty-six and twenty-seven of chapter one hundred and forty nine of the General Laws.	
	Signature
	Title

DIVISION OF OCCUPATIONAL SAFETY, 399 WASHINGTON STREET, 5TH FL., BOSTON, MA. 02108

WEEKLY PAYROLL REPORT FORM

					Employee Name & Address		q	Work Week Ending:	Awarding Auth.:	Decinot Viama.	company ivanic.
					Work Classification						
		S									
		Z									
		Т			Ηοι						
		W			Hours Worked						
		T							L 2	2	1.1
		П						Emplo	List Prime Co	i	THIE COINTACION
		S					Name	yer Si	ne Cor		חוומכונ
					Tot. Hrs.	(A)	Print Name & Title:	Employer Signature:	List Prime Contractor:		1
					Hourly Base Wage	(B)			16.5		
			Health & Welfare	(C)							
			(D) Pension		Jet Contain	Employer Contributions					
			Une Une	, ₍₁₎	utions						

Supp. Unemp (E)

(F) [B+C+D+E]

(G)
[A*F]
Weekly
Total

Hourly Total Wage (prev. wage)

Amount

NOTE: Every contractor and subcontractor is required to submit a copy of their weekly payroll records to the awarding authority.

CITY OF NEWTON

SUMMARY OF WORK AND SPECIFIC REQUIREMENTS OF THE CONTRACT

FOR PUBLIC WORKS CONSTRUCTION

A. SUMMARY OF WORK

- 1. The work under this contract includes the cleaning, general preparation and crack-sealing of the targeted roadway surfaces, and for the subsequent application of approximately nineteen thousand six hundred (19,600) square yards of Type II density micro-surfacing material which is to be applied in two (2) courses to yield a final total thickness of one-half (1/2) inches in depth. The Contractor is further advised that this work will involve extensive traffic control measures.
- 2. All other work described in the Project Manual and/or shown on the Plan(s) unless specifically indicated as not to be done.
- B. In addition the work under the contract includes:
 - 1. Work outside the Project Site as called for in the Project Manual and/or Plan(s) and as required for the performance of the work.
 - 2. The restoration of any items damaged or destroyed by encroaching upon areas outside the Project Site.
 - 3. All labor, materials, tools, and equipment necessary to do all the work required for the completion of each item as specified, which shall limited not only to the exact intent mentioned, but shall include incidental work necessary or customarily performed for the completion of that item.
 - 4. All items not specifically mentioned or noted in the Project Manual and/or Plan(s), but which are obviously necessary to make a complete working installation.
- C. The Proposed Contract Price shall be complete costs, including overhead, profit, insurance, transportation, and all other costs connected with, or incidental to the work described.

II. TIME FOR COMPLETION AND LIQUIDATED DAMAGES

- A. Upon notification the Contractor shall commence the work specified in the Project Manual as directed by the City. The work shall proceed in a continuous uninterrupted fashion with adequately staffed crews, in a satisfactory manner, which will assure that the work is completed in a timely manner to the satisfaction of the City.
- B. The time for substantial completion pursuant to <u>Article 2</u> of the <u>Contract</u> shall:

NOTICE: * TIME IS OF THE ESSENCE *

Within five (5) business days of the Notice Of Award the Contractor shall submit to the Purchasing Department:

- A signed contract.
- A Certificate of Insurance (naming the City as an additional insured)
- A Labor & Materials Payment Bond in the amount of 50% of the contract total.

Anticipated start date is July 18, 2016. Time for completion is approximately ninety (90) calendar days from the Notice To Proceed. The successful bidder must be able to accommodate the City of Newton in the scheduling of this work.

Time is of the essence for the completion of this contract. If the Contractor fails to achieve substantial or final completion of the Work within the time required by the contract, and unless an extension of time is granted, the Contractor shall pay to the City as liquidated damages, the applicable amount specified in Article 7 of the General Conditions for each day of delay. If different completion dates are specified in the Contract for separate parts or stages of the work, the amount of liquidated damages shall be assessed on those parts or stages which are delayed. To the extent that the Contractor's delay or nonperformance is excused under another section in this Contract, liquidated damages shall not be due the City. The Contractor remains liable for damages caused other than by delay.

III. INSURANCE REQUIREMENTS

- A. The Contractor shall carry and maintain until acceptance of the work such Workmen's Compensation, Automobile Liability, Public Liability, Contingent Public Liability, Property Damage and Contingent Property Damage Insurance, each including blasting coverage, as shall protect him and any sub-contractor performing work covered by this contract from all claims and liability for damages for personal injury, including accidental death, and for property damage which may arise from operations under this contract, whether such operations be by himself or by any sub-contractor or by any one directly or indirectly employed by either of them.
- B. The City shall be named as an additional insured on such policy.
- C. The amounts of such insurance shall be as follows:
 - 1. Workmen's Compensation Insurance as required by Massachusetts General Law.
 - 2. Automobile Liability Insurance on all vehicles owned or hired for a.) Bodily Injury in an amount not less than \$500,000.00 for each occurrence, and not less than \$1,000,000.00 aggregate; b.) Property Damage in an amount not less than \$250,000.00 each occurrence, and not less than \$500,000.00 aggregate.
 - 3. Public Liability Insurance and Contingent Public Liability Insurance in an amount not less than \$500,000.00 for injuries, including accidental death to any one person, and subject to the same limit for each person, in an amount not less than \$1,000,000.00 on account of one accident.
 - 4. Property Damage Insurance and Contingent Property Damage Insurance in an amount not less than \$250,000.00 on account of one accident, and in an amount of not less than \$500,000.00 on account of all accidents.
 - 5. General Liability Insurance shall include Contractual Liability Insurance.
- D. Before any work is started, the successful bidder shall be required to file with the Chief Procurement Officer certificates of insurance coverage as detailed above, with policy numbers and dates of expiration.
- E. The Contractor shall indemnify, hold harmless and defend the City and its departments, officers, employees, servants, and agents from and against all actions, causes of actions, claims, demands, damages, costs, loss of services, expenses and compensation, including attorney's fees and interest arising out of or resulting directly or indirectly from the services rendered pursuant to this Contract, provided that any such action, cause of action, claim, demand, damage, cost, loss of service, expense, compensation (1) in any way grows out of bodily injury, sickness, disease or death, or to injury to or destruction of tangible property, which (2) is caused in whole or in part by any act or omission of the Contractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, regardless of whether or not it is cased in part by a party indemnified hereunder.

END OF SECTION

GENERAL CONDITIONS

Work under this contract includes the cleaning, general preparation and crack-sealing of the targeted roadway surfaces, and for the subsequent application of approximately ten thousand five hundred (10,500) square yards of Type III density micro-surfacing material which is to be applied in two (2) courses to yield a final total thickness of one-half (1/2) inches in depth. The Contractor is further advised that this work will involve extensive traffic control measures.

All work done under this contract shall be in conformance with the City of Newton Standard Specifications, the Massachusetts Highway Department Standard Specifications for Highways and Bridges, dated 1988, 2006 Massachusetts Highway Department Project Development and Design Guide dated February 25, 2010. The Standard Special Provisions, the 1977 Construction Standards and the Supplemental Drawings dated April 2003 the 2009 Manual on Uniform Traffic Control Devices, with Massachusetts Amendments, the 1990 Standard Drawings for Signs and Supports. The 1968 Standard Drawings for Traffic Signals and Highway Lighting, the latest edition of American Standard of Nursery Stock, the Plans detail sheets the Special Provisions and all amendments will govern.

All work done under this contract shall be in conformance with the Massachusetts Highway Department Standard Specifications for Highways and Bridges dated 1988, the Supplemental Specifications dated July 1, 2015, and the Standard Special Provisions dated June 3, 2011; the 2012 Construction Standard Details, the 1996 Construction and Traffic Standard Details (as relates to traffic standard details only); the 2003 Manual on Uniform Traffic Control Devices with Massachusetts Amendments; the 1968 Standard Drawings for Traffic Signals and Highway Lighting; the latest edition of American Standard for Nursery Stock; the Plans and these Special Provisions.

The General Conditions, Supplementary Conditions and these Special Provisions shall take precedence over the General Requirements of Division 1 of the Standard Specifications of the Massachusetts Department of Transportation (MassDOT).

If during construction operations the contractor disturbs any survey monuments (temporary or permanent) the engineer may direct the contractor to reestablish the survey monuments at no additional cost to the owner. The contractor shall be required to use a Professional Surveyor registered in the Commonwealth of Massachusetts, unless otherwise directed by the Engineer.

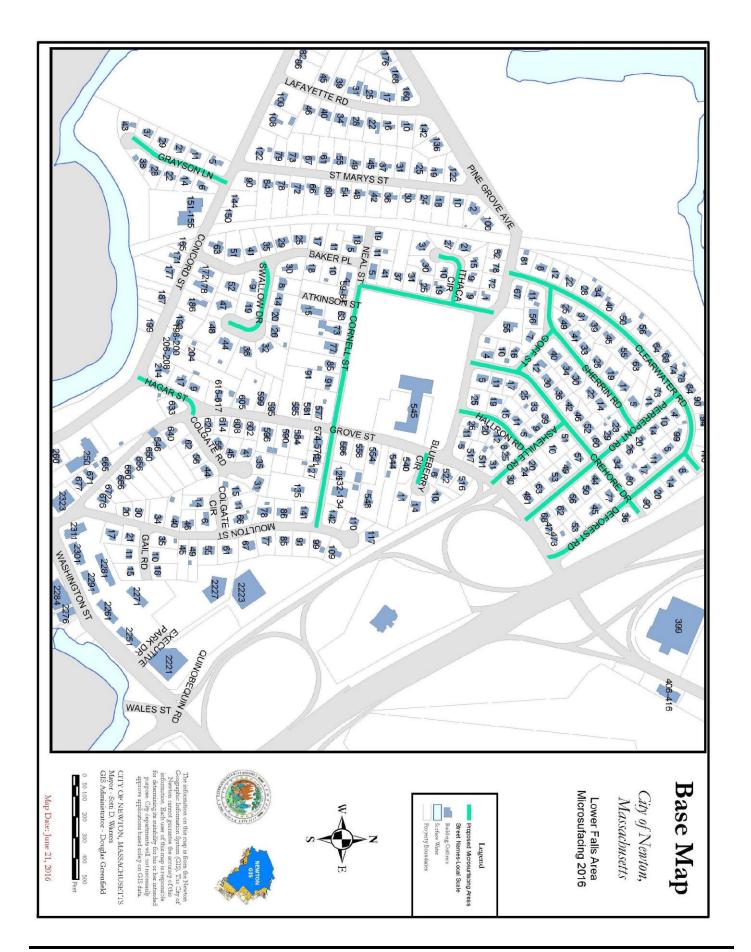
It shall be the responsibility of the contractor to coordinate with all third party utility companies that maybe affected by this contract. This shall include but not limited to adjustment or replacement of existing structures as directed by the appropriate utility company. The owner shall not compensate the contractor for work done on behalf of a third party.

STREETS SCHEDULED TO BE DONE UNDER THIS MICRO-SURFACING PROGRAM:

- The scheduling of this work shall be solely at the discretion of the Engineer.
- All aspects of this target list are subject to modification as the work progresses. In addition, the day-to-day operational aspects may also be subject to modification as the Engineer shall so direct (i.e. dates & scheduled periods, length of lanes, lengths & breadth of micro-surfacing areas).
- The Engineer reserves the right to designate any of these streets and/or roadways as arterial corridors as the field conditions may warrant at the time the micro-surfacing operation is performed.
- Scheduled streets shall typically include the portions of the intersecting roadways up to the PC or as otherwise directed.
- There is no separate labor charge under this bid: unit prices shall include full compensation for all labor, materials, tools and equipment, and all incidentals necessary to complete the work as specified herein.

MICRO-SURFACING

STREET NAME	SQUARE YARDAGE
ASHVILLE RD	1185
BLUEBERRY CIR	915
CLEARWATER RD	3120
CORNELL ST	4231
CREHORE DR	2869
DEFOREST RD	2068
GOFF ST	1252
GRAYSON LN	1627
HAGAR ST	863
HALLRON RD	1018
ITHACA CIR	1217
PIERREPONT RD	1329
SHERRIN RD	1552
ST MARY'S ST	2885
SWALLOW DR	2670
GRAND TOTAL:	28,801 Square Yards



ITEM SHEET PAGE 1

The Contractor shall insert unit prices for each item in ink, in both words and figures, and is to show a total bid price (unit price x estimated quantities). In the event a discrepancy between the written words and figures, the written words shall govern. In the event an error in the bidders total bid price, the corrected total bid obtained by the summation of the products of the unit prices multiplied by the respective quantities shall stand as the bidder's total bid price. The estimated quantities shown here are based solely upon a reasonable assessment of the project parameters, thus the Contractor is advised that the actual quantities may vary substantially as field conditions may necessitate. Regardless of the amount of actual quantities, however, the quoted unit prices shall always apply.

There is no separate labor charge under this bid: unit prices shall include full compensation for all labor, materials, tools and equipment, and all incidentals necessary to complete the work as specified herein.

NOTICE: In accordance with MGL Chapter 303 of the Acts of 2008 this bid contains price adjustments for 1) Fuel (combination of Gasoline & Diesel) and 2) Liquid Asphalt. It is the bidders' responsibility to familiarize themselves with this price adjustment program prior to entering a bid.

ITEM DESCRIPTION & BID PRICE

ESTIMATED QUANTITIES UNIT

TOTAL COST

			1
ITEM: 0.303FC-CRS - FUEL COSTS FOR CRACK-SEALING*			
 * Bidder's may elect <u>NOT</u> to bid the cost of fuel(s) separately by inserting the term <u>N/A</u> (i.e. Not Applicable) in all (4) entry lines of this Item 0.303FC-CRS. This is <u>a mandatory requirement</u> to verify the Contractor has waived their option to bid the cost of fuel(s) separately and has instead elected to factor their <u>crack-sealing fuel costs</u> into the separate bid price of <u>Item 482.171</u>. Contractor's choosing to bid this line item must <u>NOT</u> include the 			Note: This factored value is for the Comparison of
cost of fuel in Line Item 481.171.			Bids Only.
• The City of Newton reserves the right to validate the Contractor's fuel consumption information before and after awarding the bid.	3,000	Gal. CRS	(See Spec. Prov.)
0.303FC-CRS = total combined number of gallons of Fuel (Diesel & Gasoline) to install One Gallon of Crack-Sealing (CRS) Compound:			\$
(IN WORDS) Gallons Per Gallon of CRS			
(IN FIGURES) Gallons Per Gallon of CRS			
Gallons per Gal. C-S) x (\$ 1.896 /Gallon) Base Price of diesel and gasoline= (BPF) Per Mass Highway			

* Bidder's may elect NOT to bid the cost of fuel(s) separately by inserting the term N/A (i.e. Not Applicable) in all (4) entry lines of this Item 0.303FC-MS. This is a mandatory requirement to verify the Contractor has waived their option to bid the cost of fuel(s) separately and has instead elected to factor their micro-surfacing fuel costs into the separate bid price(s) of Item 487.1, 487.2 & 487.3. **Contractor's choosing to bid this line item must NOT include the cost of fuel in Line Items 487.1, 487.2 & 487.3. **The City of Newton reserves the right to validate the Contractor's fuel consumption information before and after awarding the bid. **Outractor of fuel in Line Items 487.1, 487.2 & 487.3. **Outractor of fuel in	30,000	S.Y. M-S	Note: This factored value is for the Comparison of Bids Only. (See Spec. Prov.)
ITEM: 0.303LA- DIFFERENTIAL FOR LIQUID ASPHALT (Informational Note: For the purpose of this program One (1) Gallon of Asphalt Cement used for Crack-Sealing shall contain five-thousandths(. 005) Ton of Liquid Asphalt) The Base Price for Liquid Asphalt is:			The Base Price (BPLA) shall be used to determine the monthly price differential (See Spec. Prov.)

ITEM: 0.303CP - FUEL COSTS FOR COLD PLANING*			
• * Bidder's may elect <u>NOT</u> to bid the cost of fuel(s) separately by inserting			
the term $\underline{N/A}$ (<i>i.e.</i> Not Applicable) in all entry lines of this Item .303FC.			
This is a mandatory requirement to verify the Contractor has waived their			
option to bid the cost of fuel(s) separately and has instead elected to factor			Note:
their collective fuel costs for the cold-planing & disposal operations			This factored
into the bid price of Item 129.			value is for the Comparison of Bids Only.
• Contractor's choosing to bid this line item must <u>NOT</u> include the cost of fuel in Item 129.			(See Spec. Prov.)
• The City of Newton reserves the right to validate the Contractor's fue consumption information before and after awarding the bid.	1,200	S.Y.	\$
0.303CP = total combined number of gallons of Fuel (Diesel & Gasoline) to cold-plane & dispose of One Square Yard of $1\frac{1}{2}$ "-2" Hot mix asphalt:			
(IN WORDS) Gallons Per Square Yard			
(IN FIGURES) Gallons Per Square Yard			
Gallons per S.Y) x (\$ 1.896 /Gallon) x Base Price^ of diesel and gasoline = BPF Per Mass Highway			
ITEM -129 PAVEMENT MILLING			
THE SUM OF: DOLLARS			
AND CENTS	1200	S.Y.	\$
(\$) PER SQUARE YARDS			
ITEM 220 – ADJUSTMENT OF EXISTING STRUCTURES (FRAMES AND GRATES OR FRAMES AND COVERS)			
THE SUM OF:	25	EACH	¢
AND CENTS	35	EACH	\$
(\$) PER EACH			

ITEM 358 – ADJUSTMENT OF I	EXISTING STR	UCTURES			
(BOX OR SER	VICE)				
THE SUM OF:		_ DOLLARS	_	EACH	\$
AND			5	EACH	
(\$) PER EA(СН			
Item: 472 - HOT MIX ASPHA	LT FOR MISC	WORK			
THE SUM OF:					
		_ DOLLARS			
AND		_ CENTS	180	TONS	\$
(\$) PER	TON			
ITEM: 482.171 – CRACK-SEALING (PRIOR TO THE MICRO-STORM OF INCLUDE FUEL COSTS UD.303FC-CR	JNLESS WAIV		3,000	Gal. CRS	\$
DOLLARS					
ANDCENTS					
(\$CRACK-SEAL) PER GALL	ON OF			
Item: 482.3 - SAWCUTTING EXIST	ING PAVEMEN	NT			
THE SUM OF:		_ DOLLARS			
AND		_ CENTS	500	L.F.	\$
(\$FOOT) PER	LINEAR			
ITEM: 487.1 – MICRO-SURFACING	TYPE II				
DO NOT INCLUDE FUEL COSTS U 0.303FC-MS) *	JNLESS WAIV	ED (See Item			
THE SUM OF:		_ DOLLARS			

AND		CENTS	1,000	S.Y.	\$
(\$) PER	SQUARE YARD			
ITEM: 487.2 – MICR	O-SURFACING TYPE I	Ш			
DO NOT INCLUDE F 0.303FC-MS) *	UEL COSTS UNLESS WA	AIVED (See Item			
THE SUM OF:		DOLLARS	28,000	S.Y.	\$
AND		CENTS			
(\$) PER	SQUARE YARD			
	ING OF ROADWAYS US URFACING MATERIAL	ING			
DO NOT INCLUDE F 0.303FC-MS) *	UEL COSTS UNLESS WA	IVED (See Item			
THE SUM OF:		DOLLARS	1,000	S.Y.	\$
AND		CENTS			
(\$) PER	SQUARE YARD			
Item 856.12: PORTAE	BLE CHANGEABLE MES	SAGE SIGN			
THE SUM OF:		DOLLARS			
		CENTS	60	DAYS	\$
(\$	PER D	DAY			
Item 864.04: PAVEMI (THERMOPLASTIC)	ENT ARROW AND LEGE	NDS			
THE SUM OF:		DOLLARS			
			180	SF	\$
(\$	PER S	QUARE FOOT			

Item: 866.04 - (THERMOPLA	4" REFLECTORIZA ASTIC)	ED WHITE LINE			
THE SUM OF:		DOLLARS			
AND		CENTS	10	LF	\$
(\$) PER	LINEAR FOOT			
Item: 866.12 - (THERMOPLA	12" REFLECTORIZ	ZED WHITE LINE			
THE SUM OF:		DOLLARS			
AND		CENTS	750 LF \$_		\$
(\$) PER	LINEAR FOOT			
Item: 867.04 - (THERMOPLA	4" REFLECTORIZ ASTIC)	ED YELLOW LINE			
THE SUM OF:		DOLLARS	600	LF	\$
AND		CENTS			
(\$) PER	LINEAR FOOT			
ITEM: 998 –	MISCELLANEOUS V	WORK ALLOWANCE			
THE SUM OF: TEN THOUSAN	ND	DOLLARS			
ANDZERO_		CENTS	1	ALL	\$10,000
(\$ 10,000)					
ITEM: 999 – OFFICERS	ALLOWANCE FOR	PAYMENT OF POLICE			
	ND		1	ALL	\$5,000
ANDZERO_		CENTS			
(\$ 5,000)					

TOTAL BID PRICE	\$

(Total Bid Price must be placed in paragraph "C" of the Bid Form)

END OF SECTION

SECTION 0. 303

ITEM: 0.303FC-CRS - FUEL COSTS FOR CRACK-SEALING*

Description

- * The Contractor may elect NOT to bid the cost of fuels separately, but to do so he must insert the term N/A (i.e. Not Applicable) in all (4) entry lines of Item 0.303FC-CRS on Item Sheet 2. This is a mandatory requirement to verify that the Contractor has formally waived their option to bid the cost of fuel(s) separately and has instead elected to factor the round-trip supply, delivery & installation fuel costs into the bid price of Item 2.
- (a) Under this item the Contractor shall be paid for all the fuel(s) consumed in the performance of the **crack-sealing component** of this contract.
- (b) The intent of this program is to maintain a reasonable and continuous parity with the regional fluctuations that may occur in the cost of petroleum based fuel products. It is important to note that due to the numerous types of; fuel, equipment, vehicles, programs, and efficiency factors related to each of these operational elements, and therefore unique to the Contractor's own enterprises, that any fuel adjustments made under this item are intended only to defray and offset extraordinary market trends in petroleum based fuel products.
- (c) <u>IMPORTANT NOTE: An adjustment to the cost of fuels may result in an increase of payment if the fuel market has trended upward, or it may otherwise result in a decrease of payment if the fuel market has trended downward.</u>
- (d) The City of Newton reserves the right, before awarding the Contract, to request from the Contractor a tabulated accounting of the means and methods upon which the number of gallons bid by the Contractor was derived. The intent of this evaluation is to preserve the fairness of this program by preventing bidders from placing an imbalanced bid that may ultimately cause excessive financial impact to either party. These tabulations will include, but shall not be limited to, an accounting of all **transport and application** equipment and their associated manufacturers fuel consumption rates which the Contractor/supplier intends to use to complete the work under this contract. In the event the City of Newton, subsequent to performing an analysis, determines that the Contractor's bid, with regard to the consumption of fuel for the **supply, delivery and installation of the crack-sealing material(s)**, is excessive for the type of equipment traditionally deployed for this type of work then the City of Newton reserves the right to waive any informalities in any or all bids, or to reject any or all bids, if it be in the public interest to do so.
- (e) The Contractor shall also incorporate into their bid the amounts of fuel required for any work performed by their subcontractors or by their vendors.

Method of Administration

(f) In accordance with Chapter 303 Acts of 2008, the City of Newton shall use the most current 'new' pricing of Diesel and Gasoline fuel as thay are indicated on the Mass Highway web site at the time of advertisement.

http://www.mhd.state.ma.us/default.asp?pgid=content/fuelPrices&sid=about#para24

The <u>average</u> of these two values (Diesel & Gasoline) shall serve as the value basis for determining the **Base Price** of Fuel (BPF) at the time of the advertisement. Subsequently, during the course of the contract, the **Period Price** of Fuel (PPF) shall be determined in the same manner, but at the end of each calendar month, and if the <u>averaged</u> Period Price (PPF) has either increased or decreased by more than five percentage points (5%) relative to the <u>averaged</u> Base Price of Fuel (BPF), then the cost of fuel(s) for the applicable calendar month shall be paid for at the adjusted rate, otherwise the cost of fuel(s) for the applicable calendar month shall be paid for at the initial Base Price of Fuels.

The Contractor is advised to verify these value standards and citations prior to placing their bid.

Method of Administration

- (g) When a cost adjustment is applied it shall be inclusive of the five (5%) variation.
- (h) Payments for fuel used for the **crack-sealing operation(s)** shall be calculated at the end of **each calendar month** and they shall be based upon the acceptable **number of gallons of crack-sealing compound supplied, delivered and installed** within that particular (applicable) calendar month in which the work was performed, **inclusive of the cleaning of cracks prior to the placement of the crack-sealing compound**. (**Program Note: In the event a continuous crack-sealing operation spans several days but the delivery & discharge of the material is performed in two separate months, then two separate fuel payments shall be made).**
- (i) At the end of each calendar month the Contractor shall furnish the Engineer with an accurate measured and tabular accounting which clearly shows the <u>collective number of gallons of crack-seal verified and applied during that particular (applicable) calendar month</u>. The invoiced accounting shall bear the name of the Contractor and Vendor and shall be surrendered to the DPW Agent-In-Charge <u>immediately</u> upon the termination of operations at the end of each calendar month. The City will have no obligation to pay for any errant slips which are forwarded after the crack-sealing delivery vehicle has exited the project site without prior approval from the DPW Agent-In-Charge.
- (j) No <u>upward</u> fuel adjustment will be made for any delivery and/or application related activity which takes place beyond the completion date of the contract unless the Contractor's work has been delayed due to no fault of their own (i.e. Preparation work that must be performed by others before the Contractor can complete their own tasks in the contractually allotted time.) Any such delay must be brought to the attention of the DPW Agent-In-Charge in a timely manner at which time the Agent shall investigate, verify, and document the extenuating circumstances and inform the Contractor of their decision.

Method of Payment

(k) Payment formula:

BPF = The Base Price of Fuel on the bid release date (Averaged cost of Diesel & Gasoline in \$/Gallon)

PPF = The Period Price of Fuel for the applicable calendar month (Averaged cost of Diesel & Gasoline in \$/Gallon)

G = Gallons of fuel bid by the Contractor to apply One (1) Gallon of Liquid Asphalt (Gallons of fuel bid for all crack-sealing services)

GLA = The total number of Gallons of Liquid Asphalt Installed in the applicable calendar month

If a change in (PPF) does not exceed +/- 5% relative to the (BPF) then: (BPF) x G x GLA = Fuel Payment (\$)

If a change in (PPF) does exceed +/- 5% relative to the (BPF) then: (PPF) x G x GLA = Fuel Payment (\$)

Basis of Payment

* The Contractor may elect NOT to bid the cost of fuels separately, but to do so he must insert the term N/A (i.e. Not Applicable) in all (4) entry lines of Item 0.303FC-CRS on Item Sheet 2. This is a mandatory requirement to verify that the Contractor has formally waived their option to bid the cost of fuel(s) separately and has instead elected to factor the round-trip supply, delivery & installation fuel costs into the bid price of Item 487.171.

Basis of Payment (Continued)

- (1) The cost of fuel(s) consumed for the cleaning of cracks and for the delivery, discharge and application of one gallon of Liquid Asphalt crack-sealing compound shall be paid for under Item 0.303FC-CrS. The cost of fuel used to complete the work under this item shall be made in accordance with the applicable Period Price formula for Diesel & Gasoline fuels as posted for each calendar month in which the work was performed. The Contractor will be paid the contract unit price per gallon(s) of fuel consumed for the cleaning of cracks and for the delivery, discharge and application of one gallon of Liquid Asphalt crack-sealing compound installed within each applicable calendar month as specified herein.
- (m) The Contractor shall be responsible for disbursing fuel cost payments to their subcontractors and/or to their vendors.
- (n) No payment shall be made for any fuel(s) consumed to remedy and/or to replace any deficient material supplied by the Contractor, subcontractors and/or their vendors.

ITEM: 0.303FC-MS - FUEL COSTS FOR MICRO-SURFACING*

Description

- * The Contractor may elect \underline{NOT} to bid the cost of micro-surfacing fuels separately, but to do so he must insert the term $\underline{N/A}$ (i.e. Not Applicable) in all (4) entry lines of Item 0.303FC-MS on Item Sheet 3. This is a mandatory requirement to verify that the Contractor has formally waived their option to bid the cost of fuel(s) separately and has instead elected to factor the supply, delivery & installation fuel costs into the bid price of Items 487.1, 487.2 & 487.3.
- (a) Under this item the Contractor shall be paid for all the fuel(s) consumed in the performance of the **microsurfacing component** of this contract.
- (b) The intent of this program is to maintain a reasonable and continuous parity with the regional fluctuations that may occur in the cost of petroleum based fuel products. It is important to note that due to the numerous types of; fuel, equipment, vehicles, programs, and efficiency factors related to each of these operational elements, and therefore unique to the Contractor's own enterprises, that any fuel adjustments made under this item are intended only to defray and offset extraordinary market trends in petroleum based fuel products.
- (c) <u>IMPORTANT NOTE:</u> An adjustment to the cost of fuels may result in an increase of payment if the fuel market has trended upward, or it may otherwise result in a decrease of payment if the fuel market has trended downward.
- (d) The City of Newton reserves the right, before awarding the Contract, to request from the Contractor a tabulated accounting of the means and methods upon which the number of gallons bid by the Contractor was derived. The intent of this evaluation is to preserve the fairness of this program by preventing bidders from placing an imbalanced bid that may ultimately cause excessive financial impact to either party. These tabulations will include, but shall not be limited to, an accounting of all **transport and application** equipment and their associated manufacturers fuel consumption rates which the Contractor/supplier intends to use to complete the work under this contract. In the event the City of Newton, subsequent to performing an analysis, determines that the Contractor's bid, with regard to the consumption of fuel for the **supply, delivery and installation of the micro-surfacing material(s)**, is excessive for the type of equipment traditionally deployed for this type of work then the City of Newton reserves the right to waive any informalities in any or all bids, or to reject any or all bids, if it be in the public interest to do so.
- (e) The Contractor shall also incorporate into their bid the amounts of fuel required for any work performed by their subcontractors or by their vendors.

Method of Administration

(f) In accordance with Chapter 303 Acts of 2008, the City of Newton shall use the most current 'new' pricing of Diesel and Gasoline fuel as thay are indicated on the Mass Highway web site at the time of advertisement.

http://www.mhd.state.ma.us/default.asp?pgid=content/fuelPrices&sid=about#para24

The <u>average</u> of these two values (Diesel & Gasoline) shall serve as the value basis for determining the **Base Price** of Fuel (BPF) at the time of the advertisement. Subsequently, during the course of the contract, the **Period Price** of Fuel (PPF) shall be determined in the same manner, but at the end of each calendar month, and if the <u>averaged</u> Period Price (PPF) has either increased or decreased by more than five percentage points (5%) relative to the <u>averaged</u> Base Price of Fuel (BPF), then the cost of fuel(s) for the applicable calendar month shall be paid for at the adjusted rate, otherwise the cost of fuel(s) for the applicable calendar month shall be paid for at the initial Base Price of Fuels.

The Contractor is advised to verify these value standards and citations prior to placing their bid.

Method of Administration

- (h) When a cost adjustment is applied it shall be inclusive of the five (5%) variation.
- (h) Payments for fuel used for the micro-surfacing operation(s) shall be calculated at the end of <u>each calendar</u> <u>month</u> and they shall be based upon the acceptable <u>number of square yards of micro-surfacing supplied</u>, <u>delivered and installed</u> within that particular (applicable) calendar month in which the work was performed. (<u>Program Note:</u> In the event a continuous micro-surfacing operation spans several days but the delivery & discharge of the material is performed in two separate months, then two separate fuel payments shall be made).
- (i) At the end of each calendar month the Contractor shall furnish the Engineer with an accurate measured and tabular accounting which clearly shows the <u>collective number of square yards of micro-surfacing verified and applied during that particular (applicable) calendar month</u>. The invoiced accounting shall bear the name of the Contractor and Vendor and shall be surrendered to the DPW Agent-In-Charge <u>immediately</u> upon the termination of operations at the end of each calendar month. The City will have no obligation to pay for any errant invoice slips which are forwarded after the micro-surfacing operations for the month have ceased.
- (j) No <u>upward</u> fuel adjustment will be made for any delivery and/or application related activity which takes place beyond the completion date of the contract unless the Contractor's work has been delayed due to no fault of their own (i.e. Preparation work that must be performed by others before the Contractor can complete their own tasks in the contractually allotted time.) Any such delay must be brought to the attention of the DPW Agent-In-Charge in a timely manner at which time the Agent shall investigate, verify, and document the extenuating circumstances and inform the Contractor of their decision.

Method of Payment

(1) Payment formula:

BPF = The Base Price of Fuel on the bid release date (Averaged cost of Diesel & Gasoline in \$/Gallon)

PPF = The Period Price of Fuel for the applicable calendar month (Averaged cost of Diesel & Gasoline in \$/Gallon)

G/SY = Gallons of fuel bid by the Contractor to supply, deliver & install One (1) Square Yard of Micro-Surfacing (Gallons of fuel bid for all micro-surfacing services)

SY = Total number of SquareYards of Micro-Surfacing applied in the applicable calendar month (Square Yards)

If a change in (PPF) does not exceed \pm relative to the (BPF) then: (BPF) x G/SY x SY = Fuel Payment (\$)

If a change in (PPF) does exceed +/- 5% relative to the (BPF) then: (PPF) x G/SY x SY = Fuel Payment (\$)

Basis of Payment

* The Contractor may elect NOT to bid the cost of micro-surfacing fuels separately, but to do so he must insert the term N/A (i.e. Not Applicable) in all (4) entry lines of Item 0.303FC-MS on Item Sheet 3. This is a mandatory requirement to verify that the Contractor has formally waived their option to bid the cost of fuel(s) separately and has instead elected to factor the supply, delivery & installation fuel costs into the bid price of Items 487.1, 487.2 & 487.3.

Basis of Payment (Continued)

- (l) The cost of fuel(s) consumed for the **delivery**, **discharge and application of one (1) square yard of microsurfacing material(s)** shall be paid for under **Item 0.303FC-MS**. The cost of fuel used to complete the work under this item shall be made in accordance with the applicable Period Price for Diesel & Gasoline fuels as posted for each calendar month in which the work was performed and as specified herein.
- (m) The Contractor shall be responsible for disbursing fuel cost payments to their subcontractors and/or to their vendors.
- (n) No payment shall be made for any fuel(s) consumed to remedy and/or to replace any deficient material supplied by the Contractor, subcontractors and/or their vendors.

ITEM: 0.303CP - FUEL COSTS*

Description

- * The Contractor may elect \underline{NOT} to bid the cost of fuels separately by inserting the term $\underline{N/A}$ (i.e. Not Applicable) in all entry lines of Item 0.303CP and Item 0.303OL. This is a mandatory requirement to verify that the Contractor has formally waived their option to bid the cost of fuel(s) separately and has instead elected to factor the cold-planning, the disposal of materials fuel costs, and overlay into the separate bid price of Item 129.
- (a) Under this item the Contractor shall be paid for all the fuel(s) consumed in the performance of this contract.
- (b) The intent of this program is to maintain a reasonable and continuous parity with the regional fluctuations that may occur in the cost of petroleum based fuel products. It is important to note that due to the numerous types of; fuel, equipment, vehicles, programs, and efficiency factors related to each of these operational elements and therefore unique to the Contractor's own enterprises, that any fuel adjustments made under this item are intended only to defray and offset extraordinary market trends in petroleum based fuel products.
- (c) IMPORTANT NOTE: An adjustment to the cost of fuels may result in an <u>increase</u> of payment if the fuel market has trended upward, or it may otherwise result in a <u>decrease</u> of payment if the fuel market has trended downward.
- (d) The City of Newton reserves the right, before awarding the Contract, to request from the Contractor a tabulated accounting of the means and methods upon which the number of gallons bid by the Contractor was derived. The intent of this evaluation is to preserve the fairness of this program by preventing bidders from placing an imbalanced bid that may ultimately cause excessive financial impact to either party. These tabulations will include, but shall not be limited to, an accounting of all **transport and cold-planing** related equipment and their associated manufacturers' fuel consumption rates which the Contractor/supplier intends to use to complete the work under this contract. In the event

the City of Newton, subsequent to performing an analysis, determines that the Contractor's bid, with regard to the consumption of fuel for the cold-planing & disposal of the hot mix asphalt, is excessive for the type of cold-planing and transport equipment and traditionally deployed for this type of work then the City of Newton reserves the right to waive any informalities in any or all bids, or to reject any or all bids, if it be in the public interest to do so.

The City of Newton reserves the right, before awarding the Contract, to request from the Contractor a tabulated accounting of the means and methods upon which the number of gallons bid by the Contractor was derived. The intent of this evaluation is to preserve the fairness of this program by preventing bidders from placing an imbalanced bid that may ultimately cause excessive financial impact to either party. These tabulations will include, but shall not be limited to, an accounting of all **transport and installation** equipment and their associated manufacturers fuel consumption rates which the Contractor/supplier intends to use to complete the work under this contract. In the event the City of Newton, subsequent to performing an analysis, determines that the Contractor's bid, with regard to the consumption of fuel per round trip for the **supply, delivery and installation of the hot mix asphalt, is excessive for the type transport equipment** traditionally deployed for this type of work then the City of Newton reserves the right to waive any informalities in any or all bids, or to reject any or all bids, if it be in the public interest to do so.

(e) The Contractor shall also incorporate into their bid the amounts of fuel required for any work performed by their subcontractors or by their vendors.

Method of Administration

(f) In accordance with Chapter 303 Acts of 2008, the City of Newton shall use the most current 'new' pricing of Diesel and Gasoline fuel as they are indicated on the Mass Highway web site at the time of advertisement.

http://www.mhd.state.ma.us/default.asp?pgid=content/fuelPrices&sid=about#para24

The <u>average</u> of these two values (Diesel & Gasoline) shall serve as the value basis for determining the **Base Price** of Fuel (BPF) at the time of the advertisement. Subsequently, during the course of the contract, the **Period Price** of Fuel (PPF) shall be determined in the same manner, but at the end of each calendar month, and if the <u>averaged</u> Period Price (PPF) has either increased or decreased by more than five percentage points (5%) relative to the <u>averaged</u> Base Price of Fuel (BPF), then the cost of fuel(s) for the applicable calendar month shall be paid for at the adjusted rate, otherwise the cost of fuel(s) for the applicable calendar month shall be paid for at the initial Base Price of Fuels.

The Contractor is advised to verify these value standards and citations prior to placing their bid.

Method of Administration

- (i) When a cost adjustment is applied it shall be inclusive of the five (5%) variation.
- (h) Payments for fuel shall be calculated at the end of <u>each calendar month</u> and they shall be based upon the acceptable number of square yards of hot mix asphalt cold-planed and disposed of within that particular (applicable) calendar month in which the work was performed. (Program Note: In the event a continuous cold-planing operation spans several days but the cold-planing & disposal activities are performed in two separate months, then two separate fuel payments shall be made).
- (i) At the end of each calendar month the Contractor shall furnish the Engineer with an accurate measured and tabular accounting which clearly shows the <u>collective amount of square yards cold-planed & disposed of during that particular (applicable) calendar month</u>. The invoiced accounting shall bear the name of the Contractor and Vendor and shall be surrendered to the DPW Agent-In-Charge <u>immediately</u> upon the termination of operations at the end of each calendar month. The City will have no obligation to pay at a higher rate of fuel for any unreported work performed in any calendar month but which is subsequently forwarded after the operations for the month have ceased.

(j) No <u>upward</u> fuel adjustment will be made for any cold-planing or related activity which takes place beyond the completion date of the contract unless the Contractor's work has been delayed due to no fault of their own (i.e. Preparation work that must be performed by others before the Contractor can complete their own tasks in the contractually allotted time.) Any such delay must be brought to the attention of the DPW Agent-In-Charge in a timely manner at which time the Agent shall investigate, verify, and document the extenuating circumstances and inform the Contractor of their decision.

Method of Payment

(m) Payment formula:

BPF = The Base Price of Fuel on the bid release date (Averaged cost of Diesel & Gasoline in \$/Gallon)

PPF = The Period Price of Fuel for the applicable calendar month (Averaged cost of Diesel & Gasoline in \$/Gallon)

G = Gallons of fuel bid by the Contractor to Cold-Plane & Dispose of (1) Square Yard of Bit. Conc. (Gallons bid per S.Y. for all cold-planing & disposal services)

SY = The total number of Square Yards of Bit. Conc. Cold-planed & disposed of in the applicable calendar month

If the (PPF) does not exceed +/-5% relative to the (BPF) then: (BPF) x G x SY = Fuel Payment (\$)

If the (PPF) does exceed \pm -- 5% relative to the (BPF) then: (PPF) x G x SY = Fuel Payment (\$)

Basis of Payment

- * The Contractor may elect \underline{NOT} to bid the cost of fuels separately by inserting the term $\underline{N/A}$ (i.e. Not Applicable) in all entry lines of Item 0.303CP and Item 0.303OL. This is a mandatory requirement to verify that the Contractor has formally waived their option to bid the cost of fuel(s) separately and has instead elected to factor the cold-planing, the disposal of materials fuel costs, and overlay into the separate bid price of Item 129.
- (l) The cost of fuel(s) consumed for the **cold-planing and immediate disposal of one** (1) **square yard of 1** ½"-2" **of hot mix asphalt** shall be paid for under **Item 0.303CP** (**unless waived**). The cost of fuel used to complete the work under this contract shall be made in accordance with the applicable Period Price for Diesel & Gasoline fuels as posted for each calendar month in which the work was performed and as specified herein. **The round trip cost of fuel(s) consumed for the delivery, and discharge and installation of one ton of hot mix asphalt**, inclusive of work associated with the removal and stockpiling of manhole protector rings, shall be paid for under **Item 0.303OL** (**unless waived**). The cost of fuel used to complete the work under this contract shall be made in accordance with the applicable Period Price for Diesel & Gasoline fuels as posted for each calendar month in which the work was performed, **inclusive of tack coat**, and as specified herein.
- (m) The Contractor shall be responsible for disbursing fuel cost payments to their subcontractors and/or to their vendors.
- (n) No payment shall be made for any fuel(s) consumed to remedy and/or to replace any deficient material supplied by the Contractor, subcontractors and/or their vendors.

ITEM 0.303LA - DIFFERENTIAL FOR LIQUID ASPHALT

Description

- (a) Under this item a differential value shall be calculated and applied to the payment on a monthly basis. The differential value shall be based upon the amount of Liquid Asphalt contained in the total number of **gallons of asphalt cement** supplied, delivered and installed in each respective calendar month.
- (b) **Item 0. 303LA** is to provide a structured means, whereby the cost of the Liquid Asphalt contained in **asphalt cement** is evaluated each calendar month, and under certain market conditions this value is adjusted <u>either upward</u> <u>or downwards</u> to maintain a reasonable and continuous parity with the regional fluctuations that may occur in the price of this commodity.
- (c) IMPORTANT NOTE: An adjustment to the cost of the Liquid Asphalt component may result in an <u>increase</u> of payment if the market has trended upward, or it may otherwise result in a <u>decrease</u> of payment if the market for Liquid Asphalt has trended downward. Further, these adjustments <u>do not</u> compensate the Contractor for the entire cost of the crack-sealing compound(s) consumed in the execution of this contract <u>but</u> <u>only</u> for the monthly differential value(s) which may occur with regard to the Liquid Asphalt component.

Method of Administration

(d) In accordance with Chapter 303 Acts of 2008 the City of Newton shall use the most current 'new' pricing for **Liquid Asphalt** as indicated on the Mass Highway web site at the time of advertisement.

http://www.mhd.state.ma.us/default.asp?pgid=content/fuelPrices&sid=about#para24

The value at the time of advertisement shall serve as the Base Price of Liquid Asphalt (BPLA). Subsequently, and during the course of the contract, the Period Price of the Liquid Asphalt (PPLA) component shall be determined in the same manner and at the end of each respective calendar month, and if the Period Price (PPLA) has either increased or decreased by more than five percentage points (5%) relative to the Base Price (BPLA) index, then the differential cost of the Liquid Asphalt component shall be paid for at the adjusted rate, otherwise no adjustment shall be made.

The Contractor is advised to verify these value standards and citations prior to placing their bid.

- (e) The differential value for the Liquid Asphalt component shall be calculated at the end of each calendar month and it shall be based upon the number of acceptable gallons of **asphalt cement** supplied, delivered and installed within that particular calendar month. This value shall be derived by applying a fixed factor to the tonnage of Liquid Asphalt that is contained in a single gallon of **asphalt cement**. (**Program Note: In the event a continuous delivery & application operation spans several days but is performed in two separate months, then two separate Liquid Asphalt calculations shall be made.)**
- (f) When a cost differential is applied it shall be inclusive of the five (5%) variation.
- (g) Immediately upon delivery, and subsequently upon the final discharge of the **crack-sealing** compound at day's end, the Contractor shall furnish the Engineer with an invoice that clearly indicates the amount of **asphalt cement** that was applied. The invoice shall clearly show the <u>tare weight, type of asphalt cement and the date of delivery & discharge</u> for each **tank of asphalt cement** which is ultimately delivered and discharged. The plant issued tare/weight invoicing slips are to bear the name of the vendor and shall **be surrendered to the DPW**

Agent-In-Charge <u>immediately</u> upon the delivery of the material. The City will have no obligation to pay for any errant slips which are forwarded after the delivery vehicle has exited the project site.

(h) No <u>upward</u> Liquid Asphalt component adjustment will be made for any crack-sealing material which is applied beyond the completion date of the contract unless the Contractor's work has been delayed due to no fault

of their own (i.e. Preparation work that must be performed by others before the Contractor can complete their own tasks in the contractually allotted time.) Any such delay must be brought to the attention of the DPW Agent-In-Charge in a timely manner at which time the Agent shall investigate, verify, and document the extenuating circumstances and inform the Contractor of their decision.

Method of Payment

(i) Payment formula:

BPLA = The Base Price Liquid Asphalt Cost Index on the bid release date (\$/Ton of Liquid Asphalt)

PPLA = The Period Price for One Ton of Liquid Asphalt for the applicable calendar month in which it was delivered (\$/Ton of Liquid Asphalt)

GLA = Total Gallons of Asphalt Cement applied in the applicable calendar month (Gallons)

. 005 = Tons of Liquid Asphalt in One (1) Gallon of Asphalt Cement (Tons/Gallon)

If a change in (PPLA) does not exceed +/- 5% relative to the (BPLA) then: No differential adjustment.

If a change in (PPLA) exceeds +/- 5% relative to the (BPLA) then:

(PPLA - BPLA) x GLA x . 005 = Differential Value for Current Pay Period (\$)

Basis of Payment

- (j) Under **Item 0.303LA** the differential value for **Liquid Asphalt contained in One (1) Gallon of Asphalt Cement** used to complete the work under this contract shall be made in accordance with the Period Price index values for Liquid Asphalt posted for each calendar month in which the work was performed and relative to the Base Price as specified herein. Subsequently these values shall be factored in accordance with the above-noted formula (Par. i).
- (k) The differential value for Liquid Asphalt shall be based upon \underline{a} fixed mean value of five-thousandths (. 005)Ton Liquid Asphalt contained in One (1) Gallon of Type, with said value differential being factored only on the number of Gallons of Crack-Seal actually used, verified and/or accepted by the Engineer.
- (1) No adjustment shall be made for any material which is rejected or is deemed to be of an inferior quality. Nor shall any adjustment be made for Liquid Asphalt contained in any crack-sealing material(s) which are used to remedy any deficient work which was initially performed by the Contractor and/or vendor under this contract, and which is proven to be deficient and/or of inferior quality during and/or subsequent to discharge.
- (n) The Contractor shall be responsible for disbursing the Liquid Asphalt cost adjustments to their subcontractors and/or to their vendors.

Method of Payment

(i) Payment formula:

BPLA = The Base Price Liquid Asphalt Cost Index on the bid release date (\$/Ton of Liquid Asphalt)

PPLA = The Period Price for One Ton of Liquid Asphalt for the applicable calendar month in which it was delivered (\$/Ton of Liquid Asphalt)

TBC = Total tare Tons of hot mix asphalt delivered & discharged in the applicable calendar month (Tons)

. 06 = Tons of Liquid Asphalt contained in One (1) Ton hot mix asphalt (120 lbs. Liquid Asphalt/Ton Bit. Conc.) Tons Liquid Asphalt/Ton Bit. Conc.)

If the (PPLA) does not exceed +/- 5% relative to the (BPLA) then: No differential adjustment.

If the (PPLA) exceeds +/- 5% relative to the (BPLA) then:

(PPLA - BPLA) x TBC x . 06 = Differential Value for Current Pay Period (\$)

Basis of Payment

- (j) Under Item 0.303LA the differential value for Liquid Asphalt contained in One (1) Ton of hot mix asphalt used to complete the work under this contract shall be made in accordance with the Period Price index values for Liquid Asphalt posted for each calendar month in which the work was performed and relative to the Base Price as specified herein. Subsequently these values shall be factored in accordance with the above-noted formula (Par. i).
- (k) The differential value for Liquid Asphalt shall be based upon <u>a fixed mean value</u> of six-hundredths (. 06)Ton Liquid Asphalt contained in One (1) Ton of hot mix asphalt, with said value differential being factored only on the number of Tons of Hot mix asphalt actually used, verified and/or accepted by the Engineer.
- (1) No adjustment shall be made for any material which is rejected or is deemed to be of an inferior quality. Nor shall any adjustment be made for Liquid Asphalt contained in any **hot mix asphalt** material which is used to remedy any deficient work which was initially performed by the Contractor and/or vendor under this contract, and which is proven to be deficient and/or of inferior quality during and/or subsequent to discharge.
- (o) The Contractor shall be responsible for disbursing the Liquid Asphalt cost adjustments to their subcontractors and/or to their vendors.

ITEM: 129 - PAVEMENT MILLING

DO NOT INCLUDE FUEL COSTS UNLESS WAIVED (See Item 0.303FC) *

Description

* The Contractor may elect \underline{NOT} to bid the cost of fuels separately by inserting the term $\underline{N/A}$ (i.e. Not Applicable) in all item sheet entry lines of Item 0. 303CP. This is a mandatory requirement to verify that the Contractor has formally waived his option to bid the cost of fuel(s) separately and has instead elected to factor his cold-planing & disposal fuel costs into the separate bid price of Item 129.

Description

Work under this item shall conform to the requirements of the Mass DOT Standard Specifications and the latest Supplemental Specifications for Section 120, as directed by the Engineer, and the following:

- The work shall consist of removing, by cold-planer, asphalt pavement in designated areas.
- The length and width of the excavation will be done as determined by the Engineer.
- The milled material shall become the property of the Contractor to be disposed of or recycled by him.

At cold planing locations, the transition between existing and proposed pavement shall be constructed to maintain the grade of the roadway prior to cold planing in order to produce a smooth transition without dips or bumps.

In no case will a deduction in area be made for minor un-milled areas due to catch basin or manhole castings, gate boxes or transverse joints.

Method of Award

To ensure contractor accountability, the Owner intends to award all items to a single contractor. Accordingly, contractors must bid on all items of work, and the low bidder will be the contractor whose total bid price is the lowest. The bid quantities are not guaranteed, and their primary purpose is for the determination of the low bidder.

Measurement and Payment

The unit price bid per square yard for each item shall include the cost of furnishing all labor and equipment necessary to complete the milling including the removal of pavement by other means, the removal and disposal of milled material and raised or slotted pavement markers, and cleaning the resultant surface after milling.

ITEM 220 – ADJUSTMENT OF EXISTING STRUCTURES (FRAMES AND GRATES OR FRAMES AND COVERS

Description

Work under this item shall conform to the requirements of the Mass DOT Standard Specifications and the latest Supplemental Specifications for Section 220 (Adjustment, Rebuilding and Remodeling of drainage Structures).

Materials

Concrete collars will be constructed using 4,000 PSI, 1-1/2", cement concrete masonry, at no additional cost. A minimum of four (4") inches of hot mix asphalt shall be placed and compacted to the underlying grade of the proposed wearing surface and will be considered incidental to the above Item's unit price. All concrete collars will be completely coated with (RS-1) Asphaltic Emulsion before placement of hot mix asphalt. The brick to be used shall meet the requirements of MassDOT Materials Specification M4.05.2 (Clay Brick).

Engineering

In all roadways, the castings shall be adjusted to the final grade and measured by each catch basin or manhole adjusted and approved by the Engineer. Damaged or obsolete castings shall be replaced with new castings as directed by the Engineer. Frames, Grates and Covers will be furnished by the Owner. The Contractor shall properly dispose of the old castings. No additional compensation will be made for disposal for old castings.

If in the opinion of the Engineer a drainage structure requires replacement or reconstruction, the structure or part of structure shall be rebuilt in conformance with Mass DOT specifications and measured and paid for by multiples of "Catch Basin and/or Manhole Adjusted". Each 2' feet of reconstructed structure will be paid for as an adjustment. For example if the top 4' feet of a manhole is reconstructed this will be paid for as two (2) adjustments. The Contractor shall properly dispose of the old drainage structure. No additional compensation will be made for disposal of the old structure material.

Traffic Control

The cost of flaggers and any police details, if required, will be paid or reimbursed by the Owner. The Owner will coordinate detail assignments which will be billed to the Contractor directly based on the hourly cost. The Contractor will not be reimbursed for police detail expenses incurred due to failure to cancel or cancelling without the required notice.

Method of Award

To ensure contractor accountability, the Owner intends to award all items to a single contractor. Accordingly, contractors must bid on all items of work, and the low bidder will be the contractor whose total bid price is the lowest. The bid quantities are not guaranteed, and their primary purpose is for the determination of the low bidder.

Measurement and Payment

Compensation for all labor, materials (including cement concrete, hot mix asphalt, and asphaltic emulsion), equipment and incidentals to construct the collars shall be included in the contract unit price of this item. The quantity to be measured for payment will be the number of catch basins and manhole adjusted, to be paid for at the unit price per each.

Item 358 – ADJUSTMENT OF EXISTING STRUCTURES (BOX OR SERVICE)

Description

Valve boxes shall be installed vertically, centered over the operating nut, and the elevation of the top shall be adjusted to final grade. Boxes shall be continuously and adequately supported during backfilling to maintain vertical alignment. Bricks shall be placed at the base of the flange to properly support the box. Backfill around valve boxes and anywhere excavation is made in the street shall be compacted in 12" lifts.

The boxes and tops shall be furnished by the Owner. Old castings shall be disposed of by the Contractor. The Contractor shall properly dispose of the old castings. No additional compensation will be made for disposal for old castings.

Traffic Control

The cost of flaggers and any police details, if required, will be paid or reimbursed by the Owner. The Owner will coordinate detail assignments which will be billed to the Contractor directly based on the hourly cost. The Contractor will not be reimbursed for police detail expenses incurred due to failure to cancel or cancelling without the required notice.

Method of Award

To ensure contractor accountability, the Owner intends to award all items to a single contractor. Accordingly, contractors must bid on all items of work, and the low bidder will be the contractor whose total bid price is the lowest. The bid quantities are not guaranteed, and their primary purpose is for the determination of the low bidder.

Measurement and Payment

The unit price payment for this item will be for all work described above, for each water gate adjusted.

ITEM 472 – HOT MIX ASPHALT FOR MISCELLANEOUS WORK

Description

When directed by the Engineer to use Hot Mix Asphalt for patching, the contractor shall obtain Hot Mix Asphalt as required under section 460. The hot mix asphalt shall be laid to the thickness directed and compacted to the satisfaction of the Engineer.

Basis of Measurement and Payment

Under Item 472 the Contractor will be paid the contract unit price TON of hot mix asphalt for miscellaneous work, complete in place, which unit price shall include full compensation for all excavation of undesirable material, and the disposal thereof, in addition to all labor and materials, gravel or dense graded materials as necessary and for all tools and equipment and all incidentals necessary to complete the work under this item in accordance with the plans, as directed by the Engineer and as specified herein. (The Contractor is reminded that the four (4) inch yield is to be applied in two separate two (2) inch courses).

Item 482.171 – CRACK- SEALING (PRIOR TO THE MICRO-SURFACING OPERATION)

DO NOT INCLUDE FUEL COSTS UNLESS WAIVED (See Item 0.303FC-CRS) *

Description

- * The Contractor may elect NOT to bid the cost of (crack-sealing) fuels separately, but to do so he must insert the term N/A (i.e. Not Applicable) in all (4) entry lines of Item 0.303FC-CRS on Item Sheet 2. This is a mandatory requirement to verify that the Contractor has formally waived their option to bid the cost of fuel(s) separately and has instead elected to factor the round-trip supply, delivery & installation fuel costs into the bid price of this item.
- (a) The work to be done under this item shall consist of the operations, and for the furnishing of all materials, labor and equipment necessary for removing all vegetation from the roadway surface, and for the subsequent cleaning and sealing of all random cracks located along the roadway(s) which are designated for micro-surfacing. The Engineer shall be sole judge as to what portions and/or to what limits these streets shall be sealed. To that end no work is to commence until such time as the Engineer has reviewed the streets with the Contractor and has issued the order, on a case-by-case basis, as to what extent each individual street is to be sealed.

Materials

- (b) The sealing material shall be an asphalt-fiber compound designed to improve the strength and performance of the parent asphalt sealant.
 - (c) The asphalt binder shall consist of a blend of neat asphalt binder, chemically modified crumb rubber (CMCR), and a polymer package, all of which meet the following specifications:
 - The binder will meet PG 64-28E requirements after modification including:
 - o PG grade requirements of AASHTO M320
 - Requirements of AASHTO TP70/MP19

- Modification, at a minimum, shall consist of 7% crumb rubber, and the maximum particle size for the recycled tire rubber shall be 80 mesh (#80 sieve)
- The asphalt supplier shall provide testing for both the neat and modified asphalt binders
- See below for typical modified test results for 64-28E with crumb rubber:

DSR ORIGINAL

• $kPa > 1.00 @ 64^{\circ} C$. Fail temp = $76 + {\circ} C$

DSR RTFO

• $kPa > 2.20 @ 64^{\circ} C$. Fail temp = $76 + {\circ} C$

MSCR

- JNR (MSCR unit of measure): 3.2 E < 0.5% @ 64° C
- R3200 (Average % Recovery): >70%

DSR PAV

• kPa <6000 @ 64° C

BBR

Length*

• Stiffness <300 @ -18° C. M-Value >0.300 @ -18° C

(d) The fiber reinforcing materials shall be short-length polyester fibers having the following properties:

Elongation at Break (ASTM D2256-90) $35\% \pm 3\%$ Melting Point (ASTM D3418-82) >475 degrees F (246 degrees C) Crimps/Inch (ASTM D3937-90) None Cross Section Round

 $0.25 \text{ in.} \pm 0.02 \text{ in.}$

Denier (ASTM D1577-90)

Tensile Strength (ASTM D2256-90)

Diameter

Specific Gravity (ASTM D792-91)

4.5 Nominal dpf

>70,000 psi

0.0008 in. **

1.32 to 1.40

The modified asphalt-fiber compound shall be mixed at a rate of 8% fiber weight to weight of asphalt cement. This compound having the same chemical base provides compatibility and exhibits excellent bond strengths. The fiber functions to re-distribute high stress and strain concentrations that are imposed on the sealant by thermal sources, traffic loading, etc.

Black beauty aggregate shall be black beauty abrasive boiler slag as manufactured by the Reed Corporation of Concord, N. H. or an approved equal.

Equipment

- (d) Equipment used in the performance of the work required by this section shall be subject to the approval of the Engineer and in satisfactory working condition at all times.
- (h) Air compressors shall be portable and capable of furnishing not less than 100 cubic feet of air per minute at not less than 90 lbs. per square inch pressure at the nozzle. The compressor shall be equipped with traps that will maintain the compressed air free of oil and water.
- (i) Manually operated gas powered air-broom or self-propelled sweeper designed especially for use in cleaning highway and airfield pavements shall be used to remove debris, dirt, and dust from cracks.

^{*} At temperatures ranging from ambient to maximum finished product mix temperature

^{**} Subject to Normal Variations

- (j) Hand tools shall consist of brooms, shovels, metal bars with chisel shaped ends, and any other tools which may be satisfactorily used to accomplish this work.
- (k) The unit used to melt the joint sealing compound shall be double boiler, indirect fired type. The space between the inner and outer shells shall be filled with a suitable heat transfer oil or substitute having a flash point of not less than 600 degrees F. The kettle shall be equipped with a satisfactory means of agitating the joint sealer at all times. This may be accomplished by continuous stirring with mechanically operated paddles and/or by a continuous circulating gear pump attached to the heating unit. The kettle must be equipped with thermostatic control calibrated between 200 degrees F. and 550 degrees F.
- (1) Equipment for drying if necessary and for grass removal in cracks shall be a Propane Torch unit which operates at 2000 degrees F. and gas velocity 3000 feet per second.
- (m) Equipment for applying the sealing material shall consist of a pressure applicator shoe with suitable hose connection to the melting kettle. The applicator shall be equipped with a three (3) inch or a five (5) inch applicator head as directed by the Engineer. The Engineer may at his discretion require the Contractor to change from one size applicator head to another when moving from one job site to another.

Method of Construction

- (n) All old material and other debris removed from the cracks shall be removed from pavement surface immediately by means of power sweepers or hand brooms or air brooms. However in every case the Contractor shall exercise extreme care so as not to blow ejected granular or vegetative material at pedestrians, vehicles. Further, all ejected material shall be cleaned from all peripheral areas, inclusive of both public and private lands.
- (o) When cracks and/or seams show evidence of vegetation, it shall be removed and sterilized by use of a Propane Torch unit for the purpose of eliminating all vegetation, dirt, moisture and seeds.
- (p) No sealing material shall be applied in damp cracks or where frost, snow, or ice is present or when the ambient temperature is below 40 degrees F.
- (q) Joint sealing material shall be heated and applied at temperature specified by the manufacturer and approved by the Engineer. Minimum application temperature shall be 320 degrees Fahrenheit.
- (r) All cracks shall be sealed according to the manufacturer's instructions and as specified herein and the sealer shall be well bonded to the pavement.
- (s) When cracks have been satisfactorily sealed, they shall be dusted over with aggregate as recommended to provide non-skid surface for traffic.
- (t) Crack Sealing shall be meticulously applied by workmen skilled in the use of applying crack/joint sealing compound, via the use of special dispensing heads and associated equipment, such that the maximum height of the compound is no more than one-eighth (1/8) inch above the existing pavement. The intent of this order is to ensure that no crack sealing compound penetrates, contaminates, and/or otherwise interferes with any portion of the second course of the micro-surfacing material in order to preserve the homogeneous integrity of the second course of micro-surfacing material.

Method of Measurement

(u) Prior to the commencement of the crack sealing operation the Contractor is to accommodate the Engineer in performing his pre-application inspection of the holding tank to verify the number of gallons in the unit. Subsequently, upon the completion of the crack sealing operation the Contractor shall again accommodate the Engineer in performing his post-treatment inspection of the holding tank to verify the number of gallons remaining in the unit.

(v) Cleaning and sealing of random cracks in bituminous concrete pavement shall be measured by the actual number of gallons of **sealant** applied, complete in place.

Basis of Payment

- * The Contractor may elect NOT to bid the cost of (crack-sealing) fuels separately, but to do so he must insert the term N/A (i.e. Not Applicable) in all (4) entry lines of Item 0.303FC-CRS on Item Sheet 2. This is a mandatory requirement to verify that the Contractor has formally waived their option to bid the cost of fuel(s) separately and has instead elected to factor the round-trip supply, delivery & installation fuel costs into the bid price of THIS ITEM.
- (w) Under Item 2 the Contractor will be paid the contract unit price per gallon of crack—seal used for the cleaning and sealing of random cracks in bituminous concrete pavement, complete in place, which unit price shall include full compensation for all labor, materials, tools and equipment, and all incidentals necessary to complete the work under this item as directed by the Engineer and as specified herein.

ITEM 482.3-SAWCUTTING EXISTING PAVEMENT

DESCRIPTION

This work shall consist of the sawcutting of asphalt and concrete pavements, sidewalks and trenches where shown on the plans, and as required by the Engineer.

EQUIPMENT

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The saw shall be capable of wet cutting to neat lines established by the Engineer. The equipment shall be approved by the Engineer prior to commencing work. The pavement shall be sawcut through its full depth at all joints between existing and proposed pavements, and at all utility trenches, to provide a uniform, smooth vertical surface. Existing pavements shall be sawcut at the limits of work as shown on the plans and as required by the Engineer. Sawcut edges which become broken, ragged or undermined as a result of the Contractor's operations shall be re-cut prior to the placement of abutting proposed pavement at no additional cost to the Department. Sawcut surfaces in asphalt pavements shall be sprayed or painted with a uniform, thin coat of asphalt emulsion tack coat immediately before placement of hot mix asphalt against the cut surfaces.

Method of Measurement.

Sawing pavement will be measured by the foot along the cut line.

Basis of Payment.

Sawing pavement will be paid for at the respective contract unit prices per foot, which prices shall include all labor, materials and equipment necessary to perform the work. Sawcuts made in existing pavement in areas of trenching for new conduit, in areas of new or reset curb, or trench limits for drainage/water work, will be included in the unit price under the respective items and will not be paid for separately under this item.

SECTION 3

Item 487.1 - MICRO-SURFACING Type II

Item 487.2 - MICRO-SURFACING Type III

Item 487.3 - LEVELING OF ROADWAYS USING MICRO-SURFACING MATERIAL

DO NOT INCLUDE FUEL COSTS UNLESS WAIVED (See Item 0.303FC-MS) *

Description

- * The Contractor may elect NOT to bid the cost of micro-surfacing fuels separately, but to do so he must insert the term N/A (i.e. Not Applicable) in all (4) entry lines of Item 0.303FC-MS on Item Sheet 3. This is a mandatory requirement to verify that the Contractor has formally waived their option to bid the cost of fuel(s) separately and has instead elected to factor the supply, delivery & installation fuel costs into the bid price of Items 487.1, 487.2 & 487.3.
- (a) Under Item 487.1 and Item 487.2 the Contractor is to apply two courses of either Type II or Type III latex based micro-surfacing material, with each course being one-quarter of an inch (1/4") in thickness, so as to ultimately provide a total two-course yield of not less than one-half of an inch (1/2") in thickness. The application of micro-sealing may only be done subsequent to the independent application of crack sealing, tack coat and/or any leveling operations, either as specified on the plans and/or as directed by the Engineer. However, no micro-surfacing material shall be applied over any crack-sealing compound until such time as the crack-sealing has attained full-cure status and all residual granular material has been entirely removed from the pavement surface. Subsequently, the micro-surfacing shall be guaranteed against failure of any kind for a period of two years from the date of application and any repairs and/or spot repairs shall be made at the Contractors own expense and to the satisfaction of the Engineer. Crack-sealing and/or leveling courses shall be paid under separate items.
- (b) Under **Item 487.3** the Contractor shall apply multiple levels of micro-surfacing material(s) to any portion of the roadway for the purpose of refining the localized gradient(s) and such application(s) are to be made prior to the standard two-course application of the micro-surfacing material as described under **Item 487.1** and **Item 487.2**. The purpose of the leveling application(s) is to provide a more acceptable base gradient of the roadway upon which the final two-course application will be subsequently installed. This work shall only take place at the direction of the Engineer and it shall be carried forward, in multiple passes, until the designated zone has been leveled to a breadth and height/elevation that is acceptable to the Engineer and in accordance with the plans and/or as directed by the Engineer.
- (c) The Contractor is advised that the City of Newton may provide a stockpile site but for the aggregate materials only, and only in such places, and to such limits, and in such amounts, and for such time periods as are preapproved by the Commissioner of Public Works but the ability for the City of Newton to provide a site is not guaranteed. Hay bales of an approved type, and in a sufficient number, shall be satisfactorily placed around all catchbasins which lie 'downstream' from the stockpile site primarily to prevent any rain generated sludge from entering into the drainage system. Further, any stockpile sites shall be thoroughly cleaned and fully restored to their original condition, at the Contractors own expense, once the stockpile site is no longer needed to service the operational zone for which they were created.
- (d) The City of Newton will absorb the cost of the water by allowing the Contractor to draw from only those hydrants which are pre-approved by the Superintendent of Water. However, no water is to be drawn from any City hydrant until such time as the Contractor has posted a one-thousand (\$1000) dollar deposit with the Water Superintendent, and has obtained in return a water meter assembly equipped with a backflow preventer. Any water drawn for any operation under this contract is to be metered through this unit. At the end of the micro-surfacing application, and providing that the water meter/backflow preventer unit has been returned to the Water

Description (Continued)

Superintendent, complete and in good working order, then the deposit shall be refunded to the Contractor by the Superintendent.

(e) Micro-surfacing shall be applied in accordance with the directives as specified on the plan, as directed by the Engineer and as specified herein.

Materials

- (f) The micro-surfacing shall be an approved mixture and/or an approved equal of cationic latex modified asphalt emulsion, mineral aggregate, water, as well as mineral and field control additives. The entire blend shall be continually monitored such that it is consistently and properly blended, mixed, and ultimately spread on the initially dry, sealed and cleaned roadway surface in accordance with this specification and/or as directed by the Engineer.
 - Emulsified Asphalt: The emulsified asphalt shall be manufactured using a quick-set latex modified cationic type CSS-1H emulsion which shall conform to the requirements specified in AASHTO-M208 and ASTM 2397. The emulsified asphalt and/or the emulsion shall pass all applicable storage and settlement tests. The latex shall be milled into the asphalt in such a manner that the entire mixture is homogeneous and properly blended.
 - Special Residue Properties: Distallation of residue will be at a temperature of three hundred fifty (350) degrees Fahrenheit for twenty (20) minutes. The softening point of the residue shall be one hundred forty (140) degrees Fahrenheit minimum. Viscosity, absolute at one hundred forty (140) degrees Fahrenheit, shall be eight thousand (8000) poise minimum.

Aggregate:

- The mineral aggregate used shall be of the type and grade specified for micro-surfacing. The aggregate shall be manufactured crushed stone such as granite, slag, limestone, chat, or high quality aggregate or combination thereof.
- The aggregate including natural fines when tested by AASHTO methods T11 or T27 or ASTM C117 or C136, must meet the referenced gradation requirements.
- Deleterious Substances To limit the permissible amount of clay-like fines in the aggregate, a sand equivalent value of sixty five (65) or higher is required when tested by ASTM 2419.
- Soundness The aggregate shall have a weighted loss of not more than fifteen (15%) percent when the sodium sulfate test is used or twenty (20%) when the magnesium sulfate test is used.
- Hardness The aggregate wear, from resistance to abrasion, shall be a maximum of thirty five (35%) when using AASHTO T96 or ASTM C131 test methods.
- Stockpile- Stockpiles shall be placed only in those areas where there is no threat of the aggregate becoming contaminated from other soils, chemicals, oils, leaves, debris and/or any other substance which is foreign to the base material from which the aggregate has been manufactured.
- Water: Water shall be potable and shall be free from harmful salts, and if drawn from the City water supply then the directives of **Paragraph** (d) shall apply.

(Continued on next page)

Materials (Continued)

• Modifier: A special quick-setting liquid emulsifier agent may be milled into the asphalt emulsion to provide effective control of the required quick-set properties. This additive shall be made available by the chemical supplier, or emulsion manufacturer, and it is to be certified, in advance of its use, that the additive is compatible with the mixture. Only after the Engineer has been apprised that this agent is to be added to the mix, shall it be properly and consistently blended into the mixture in accordance with the manufacturer's instructions. The Contractor is to provide the Engineer with the job mix formula such that every additive is clearly stated as to its type and end use as well as denoting the manufacturers name and lot number.

The emulsified asphalt shall be so formulated that when the paving mixture is applied at a thickness of one (1) inch with the relative humidity at not more than fifty (50%) and the ambient air temperature of at least seventy five (75) degrees Fahrenheit, the material will cure sufficiently so that rolling traffic can be allowed in one (1) hour with no damage to the surface.

- Mineral Additive: Only non-air entrained portland cement shall be added to the mineral aggregate, and only in the amount as pre-determined by the laboratory mix design, a copy of which shall be delivered to the Engineer at least seven days prior to the commencement of operations.
- **Laboratories:** Laboratories shall be independently operated and shall not be under the control of the Contractor. Further, laboratories shall be **pre-approved by the Engineer** in advance of all testing and/or mix design procedures, and upon request said laboratories are to submit to the Engineer evidence which satisfactorily ensures their qualifications to meet both the testing and/or the mix design needs of the project.
- (g) At least seven days prior to the commencement of operations the Contractor is to submit to the Engineer, in hard-copy form, a signed list which includes the vendors name and address, the component material(s) which will be supplied by the vendor, and a certificate of compliance which clearly states that the mixture component they are supplying to this project will and shall meet or exceed the design mix criteria for the duration of this project. Once the laboratory, the design, the materials, and/or the vendors have been approved there shall be no substitution unless otherwise allowed and/or otherwise directed to do so by the Engineer. In any event the Contractor shall repair, at his own expense, any surface failure(s) which occur for any reason within two years time from the date of application, and the Engineers decision as to what constitutes a failure of the microsurfacing shall be final and all subsequent repairs shall be made to his satisfaction.
- (h) The job mix formula shall be in accordance with all applicable current recommendations of the International Slurry Surfacing Association (ISSA) in effect at the time of the micro-surfacing application and shall further provide for a minimum Marshall stability of one thousand eight hundred (1800) pounds and a flow of six (6) to sixteen (16) units when tested according to ASTM 1559 or AASHTO 245 procedure as modified.

(Continued on next page)

Materials (Continued)

The component materials shall comply with the following limits:

- Residual Asphalt: 5% 9% by dry aggregate weight
- Mineral Additive: 0.5% 3% by dry weight of aggregate
- Latex Modifier: As required to provide specified properties
- Field Control Additive: As required based on previous proven results
- Water: As required based on previous proven results

Aggregate Gradations:

	Type II	Type III
Screen Size	% Passing	% Passing
3/8 "	100	100
#4	90-100	70-90
#8	65-90	45-65
#16	40-65	30-50
#30	25-45	19-34
#50	15-30	12-25
#100	10-21	7-18
#200	5-13	4-12

Informational Note: Type II is typically used on residential streets @ 18-22 lbs. density per sq.yd.

Type III is typically used on arterial streets @ 25-30 lbs. density per sq. yd.

Method of Construction

- (i) Equipment, tools, and machines used in the performance of this work shall be maintained in satisfactory working condition at all times to ensure a high quality product. The Engineers decision in these matters shall be final.
- (j) The Contractor shall be ultimately responsible for ensuring that the roadway surface is thoroughly clean and free of all vegetation and granular material(s) prior to the application of the micro-surfacing material. The City of Newton may provide certain street sweeping resources and associated services to aid the Contractor in this endeavor, but the ultimate responsibility for ensuring that the roadway surface is totally cleaned and properly prepared lies with the Contractor, and all surfaces shall be cleaned to the satisfaction of the Engineer.
- (k) All businesses, homes and/or City agencies that will be, and/or may potentially be affected by any aspect of the micro-surfacing operations, shall be notified at least twenty four (24) hours in advance of that given operation. This notification shall be provided in a hard copy form that on a format that is acceptable and pre-approved by the Engineer. Further, the Contractor is to obtain pre-approval and subsequently apprise the Engineer of all such postings, notices, and/or notifications, at least twenty four (24) hours in advance of the actual notification process. Notices that are posted at businesses and/or homes along the route shall be left in a secure but highly visible location that is nearest to the regular mail delivery as possible at each address. In addition, any general notices

Method of Construction (Continued)

that are posted along the street, and which are placed on existing posts and poles, are not to be fastened with any metal device. Further, no signs are to be fastened to trees in such a way that the bark of the tree is penetrated and/or damaged by the fastening means, thus only string and/or plastic 'quick-ties' are to be used, and no posting upon trees is to take place without the prior consent of the Engineer. All temporary signs are to be removed immediately upon the completion of the micro-surfacing operation which is particular to that portion of the project zone.

- (1) Traffic control elements (cones, barrels, signs, etc.) shall be of the highest quality with the visibility target value still substantially intact, and such traffic control elements shall comply with the directives as shown on the plans and/or as may be otherwise directed by the Engineer. Traffic control elements shall be provided in such number, and shall be subsequently deployed by the Contractor to the satisfaction of the Engineer, to ensure that vehicular and pedestrian traffic is properly warned and/or channelized at all times in and around the project site and operations area(s). These same suitable methods shall be used by the Contractor to protect the micro-surface from traffic until the new surface can support traffic without damage.
- (m) The material shall be spread only on an initially dry roadway surface and the atmospheric temperature is at least forty eight (48) degrees fahrenheit and rising, and there is no threat of rain and/or temperatures below thirty two (32) degrees fahrenheit predicted within forty eight (48) hours of the application of the micro-surfacing material. Said weather conditions shall be based upon predictions as professionally forecast.
- (n) The contractor shall apply a tack coat consisting of one part emulsified asphalt and three parts potable water with a distribution rate of .10 to .15 gallons per square yard. The emulsified asphalt shall be manufactured using a quick-set latex modified cationic type CSS-1H emulsion which shall conform to the requirements specified in AASHTO-M208 and ASTM 2397. The emulsified asphalt and/or the emulsion shall pass all applicable storage and settlement tests. The final mixture, upon application, shall be blended in such a manner that the tack coat mixture is homogeneous and of uniform consistency.
- (o) The emulsified asphalt tack coat shall be applied only to an initially dry roadway surface and the atmospheric temperature is at least forty eight (48) degrees fahrenheit and rising, and there is no threat of rain and/or temperatures below thirty two (32) degrees fahrenheit predicted within forty eight (48) hours of the application of the microsurfacing material. Said weather conditions shall be based upon predictions as professionally forecast.
- (p) The emulsified tack coat shall be applied systematically ahead of the micro-surfacing operation, and in such a responsible manner that the tack coat ultimately serves the to create and ensure a viable long-lasting bond between the top of the entire existing roadway pavement and the entire bottom face of the micro-surfacing material. To that end the equipment and dispensing means by which the tack coat emulsion is ultimately blended and applied is to be of such manufacture that the tack coat is uniformly and consistently applied to the existing roadway surface in accordance with the emulsion manufacturer's directives. Further, the tack coat shall be applied to the roadway via a spray bar that is fully adjustable to achieve the desired uniform application rate across the entire roadway surface, however the Contractor shall take all precautions to prevent the tack coat from entering into any utility and/or drainage structure. In addition, no peripheral objects, such as the face of curbing, cars, site personnel, trees, etc., are to be splattered with the tack coat emulsion during the application process, nor shall the Contractor allow the newly applied tack coat from being tracked to any adjacent area(s).

Method of Construction (Continued)

- (q) Leveling course(s) shall comply with **Paragraph** (b) and the mixtures shall be spread to fill cracks and minor surface irregularities at various points along the route as determined by the Engineer. Leveling courses are to be independently applied and shall not be made part of the full-width mat application. For those areas where the leveling course is applied in excess of one (1) inch then the Contractor shall roll these areas with a self-powered three (3) ton roller.
- (r) The micro-surfacing material shall be mixed and processed, in accordance with the International Slurry Surfacing Associations (ISSA) recommendations and guidelines, by a self-propelled self-contained micro-surfacing mixing unit designed to specifically provide a continuous flow that will accurately deliver the properly proportioned, and properly blended aggregate, emulsified asphalt, mineral, field control additives, and water, such that the mixture is consistently applied and is continually free of lumps, streaking, segregation and/or any other undesirable characteristic. To that end the mixing unit shall be typically equipped with a revolving multi-blade twin shafted mixer that subsequently discharges the mixed, and properly blended material(s), on a continuous flow basis and without interruption.
- (s) The mixing unit shall be equipped with self-loading devices which shall provide for the loading of materials as the micro-surfacing application process progresses.
- (t) Self-propelled self-contained mixing units shall be capable of providing a continuous flow of properly blended micro-surfacing material such that the transverse construction joints occur only at the end of the run as pre-determined by the Engineer. The construction joints and overlapping of previous work shall be in accordance with the directives on the plan and/or as directed by the Engineer.
- (u) The emulsion pump shall be a heated positive displacement type which is capable of providing a continuous and uniform heat at the optimum and proper temperature range.
- (v) The mixing unit shall be provided with a series of separate metering controls for each material component of the mixture to ensure that the final blend of the collective micro-surfacing material has been properly proportioned and blended in accordance with the approved mix design criteria. The means by which each material is metered and/or calibrated shall be of such a nature that they are easily read, are in good condition, and are of a type and style that is acceptable to the Engineer. Calibration documentation, indicating that each device has been independently and officially validated within the year preceding the application, shall be delivered to the Engineer upon request.
- (w) The micro-surfacing mixture shall be uniformly spread by means of pre-approved units. Typically these units shall consist of a mechanical type spreader box attached to the mixer, which is equipped with paddles designed to both agitate the materials while dispersing the material throughout the box. A front and rear seal shall be provided to prevent any spillage of material, and the rear seal shall also act as a final strike-off and it shall be adjustable. The spreader box and rear strike-off shall be so designed and operated that a uniform consistency is achieved to produce an even flow and to produce a consistently uniform mat that is free from any blemishes. The spreader box shall have a suitable means to provide for a 'side-shift' such that the box can be adjusted to accommodate for the variations in pavement width and for longitudinal alignment.
- (x) Longitudinal joints shall be straight and shall be overlapped in accordance with the directives on the plan(s) and when completed, shall form a neat, uniform, and water-tight seal. Half-passes and odd width passes shall be used only in minimum amounts, and only by approval of the Engineer.
- (y) All excess residual material of any type, plates, shields, tools, signs, machinery, vehicles and/or any other impediment and/or device used during the micro-surfacing operations for that given portion of roadway under previously constructed, shall be removed from the (incremental) project zone before the roadway is open to traffic. The Engineer's decision shall take precedence in these matters.
- (z) The Contractor shall permit the Engineer to have samples taken at any time during these

operations, and for any component used in the production of the micro-surfacing material, including the final mixture of the micro-surfacing material itself. Subsequent testing of these samples shall be conducted by a laboratory approved and/or selected by the Engineer. In the event the material(s) being tested fail the test(s) for compliance of the specifications contained in this section then the Contractor shall bear the expense of these tests and shall be responsible for replacing and/or repairing, to the satisfaction of the Engineer, any portion of the micro-surfacing associated with the failed component of the test(s).

Method of Measurement

- (aa) Measurements for payment under **Item 487.1** and **Item 487.2** shall be taken by the **square yard** for a two-course application of micro-surface material complete in place.
- (ab) Measurements for payment under **Item 487.3** shall be taken by the **square yard** for the actual area leveled complete in place, regardless of the number of passes that may be required to achieve an acceptable base gradient using micro-surface material, and such work shall be applied to the limits as pre-approved by the Engineer and to the heights/elevations as he deems appropriate to achieve final roadway serviceability.

Basis of Payment

- * The Contractor may elect NOT to bid the cost of micro-surfacing fuels separately, but to do so he must insert the term N/A (i.e. Not Applicable) in all (4) entry lines of Item 0.303FC-MS on Item Sheet 3. This is a mandatory requirement to verify that the Contractor has formally waived their option to bid the cost of fuel(s) separately and has instead elected to factor the supply, delivery & installation fuel costs into the bid price of Items 487.1, 487.2 & 487.3.
- (ac) Under **Item 487.1** and **Item 487.2** the Contractor will be paid the contract unit price **per square yard** for a two-course application of micro-surface material, complete in place, which unit price shall include full compensation for all labor and materials, and for all tools and equipment, including cleaning of roadways, providing and establishing all traffic control elements, establishing/re-establishing detouring, notifications, tack coat, and all other incidentals that are necessary to complete the work under this item in accordance with the plans, as directed by the Engineer, and as specified herein.
- (ad) Under **Item 487.3** the Contractor will be paid the contract unit price **per square yard** for the multiple pass application of micro-surface material used to level roadways, complete in place, which unit price shall include full compensation for all labor and materials, and for all tools and equipment, including cleaning of roadways, providing and establishing all traffic control elements, establishing/re-establishing detouring, notifications, and all other incidentals that are necessary to complete the work under this item in accordance with the plans, as directed by the Engineer, and as specified herein.

ITEM 856.12 – PORTABLE CHANGEABLE MESSAGE SIGN

Description

Under this item the Contractor shall furnish and deploy a mobile MUTCD compliant (Manual On Uniform Traffic Control Device) solar and/or battery powered electronic message signboard which shall be repositioned as necessary, at the direction of the Engineer, for the purpose of notifying the General Public of project related issues. However, no signboard units are to be deployed on the project unless pre-approved, authorized and/or ordered by the Engineer in advance of their use.

Method of Compliance

The mobile signboard shall be mounted on a towable trailer and the entire assembly is to be factory assembled as a single unit.

- (c) The signboard shall be powered by a silent means only as no fuel powered generators are to be used.
- (d) The display board shall be approximately thirty (30") inches high by approximately sixty
- (60") inches wide and equipped with three (3) light emitting diode (LED) screens, each of which shall be of the 'auto-dimming' type on a black background and having full matrix capability. The 'characters' (the height of the alphanumeric) shall be no less than seven (7") inches tall but in all cases, whenever possible, the height of the 'character' shall be maximized (typically up to twenty-four (24") inches in height). Display boards shall have the capability of providing scrolling and/or flashing messages.

The unit shall be fully programmable by field personnel so that the messages can be changed on an immediate basis at the direction of the Engineer.

The trailer shall be entirely tamper-proof to prevent both the unauthorized access to the programming means of the display board as well as to prevent the unauthorized movement of the trailer itself. Further, the trailer shall be secured in such a manner so as to prevent theft or vandalism.

As directed by the Engineer the signboard unit shall be deployed, repositioned, supplemented and/or discontinued as often as necessary, to meet the ever-changing messaging requirements of the project, and such orders shall occur with immediacy.

As directed by the Engineer the signboard messages shall be composed, changed and/or discontinued as often as necessary, in order to meet the ever-changing messaging requirements of the project and such changes to the composition of the message shall occur with immediacy.

Signboard units shall be placed in conspicuous locations so they, as well as the messages, are easily seen, but at no time shall the units interfere with pedestrian right-of-ways nor vehicular flow. To that end the Contractor must be prepared to coordinate the siting of the units with the Engineer.

Signboards are to be 'leveled' with the roadway surface. Blocking, jacking and/or chocking shall be done in a responsible manner to ensure that the trailer is fully stabilized.

The Contractor is responsible for ensuring that the unit is fully operational at all times, and any repairs, reprogramming, redeployments for solar siting purposes, battery and/or bulb replacements, wholly defective units, units which are rendered unserviceable, or the like, shall be addressed and corrected with immediacy. The intent of this order is to ensure that the continuity of messages are not disrupted and that they are clear and visible at all times within the zone in which the unit is sited.

No signboard units are to be deployed on the project unless pre-approved, authorized and/or ordered by the Engineer in advance of their use.

The Engineer reserves the right to limit the size of the trailer and/or display board to the above noted type should it be deemed in the best interests of the neighborhood's pedestrian and/or traffic flow to do so.

At no time shall any signboard deployed to the site be without a message. The intent of this order is to assure all parties that the board is fully operational while providing 'secondary' messaging during those periods when 'primary' messaging is not required. To that end, once the Engineer has declared that the unit is no longer required the Contractor shall immediately remove it from the site.

The locations of, as well as the actual messages displayed, on the two (2) electronic variable message sign boards shall be determined in the field, by the engineer, changes in which will be required as often as he / she deems necessary to properly inform the public as to critical project activities.

Method of Measurement

The Contractor shall be paid per Calendar Day for each signboard unit approved, authorized and/or ordered by the Engineer. No payment shall be made for any Calendar Days after the Engineer has ordered that the service of the unit is no longer required.

Basis of Payment

Under Item 856.12 the Contractor will be paid the contract unit price per approved Calendar Day for each signboard unit authorized and/or ordered by the Engineer. The express intent, under this item is to re-use the signboards, moving the signboards from project zone to project zone as the construction operations progress, without any further additional compensation under this item. Under this item signboards are to be furnished and placed which unit price shall include full compensation for all labor, materials, tools and equipment and all incidentals necessary to complete the work under this item, as shown on the plans, as directed by the Engineer and as specified herein.

Item 864.04: PAVEMENT ARROW AND LEGENDS (THERMOPLASTIC)
Item 866.04: 4" REFLECTORIZED WHITE LINE (THERMOPLASTIC)
Item 866.12: 12" REFLECTORIZED WHITE LINE (THERMOPLASTIC)
Item 867.04: 4" REFLECTORIZED YELLOW LINE (THERMOPLASTIC)

General

The work under these items consists of furnishing materials and the application of Reflectorized Pavement Markings in accordance with these plans and specifications, the Massachusetts Department of Transportation Standard Specifications, latest edition and the Manual on Uniform Traffic Control Devices, current edition, and the following:

The Contractor shall adhere to Section 860 of the Standard Specifications and the following:

Materials:

All materials under these items shall adhere to the appropriate items under Section 860 of the Standard Specifications, M.7.00.00 and the following:

White Thermoplastic Reflectorized Pavement Markings – M7.01.03 Yellow Thermoplastic Reflectorized Pavement Markings – M7.01.04

Measurement:

- 4" Reflectorized White Line (Thermoplastic) shall be paid for the by linear foot installed.
- 4" Reflectorized Yellow Line (Thermoplastic) shall be paid for by the linear foot installed.
- 12" Reflectorized White Line (Thermoplastic) shall be paid for by the linear foot installed.

Pavement Arrow and Legend (Thermoplastic) shall be paid for by the square foot installed.

All shapes shall be measured at their widest point and at their longest point. These two figures shall then be multiplied together to generate the appropriate square footage.

The contractor shall not be paid for the gaps found in any dashed pavement applications.

Payment:

Under Item 864.04 the Contractor will be paid the contract unit price for furnishing and applying, Pavement Arrow and Legend (Thermoplastic), complete in place, which unit price shall include full compensation for all labor,

materials, tools and equipment and all incidentals necessary to complete the work under these items as shown on the plans, as directed by the Engineer and as specified herein.

Under **Item 866.04** the Contractor will be paid the contract unit price for furnishing and applying 4" Reflectorized White line, complete in place, which unit price shall include full compensation for all labor, materials, tools and equipment and all incidentals necessary to complete the work under these items as shown on the plans, as directed by the Engineer and as specified herein.

Under **Item 866.12** the Contractor will be paid the contract unit price for furnishing and applying 12" Reflectorized White line, complete in place, which unit price shall include full compensation for all labor, materials, tools and equipment and all incidentals necessary to complete the work under these items as shown on the plans, as directed by the Engineer and as specified herein.

Under **Item 867.04** the Contractor will be paid the contract unit price for furnishing and applying 4" Reflectorized Yellow line, complete in place, which unit price shall include full compensation for all labor, materials, tools and equipment and all incidentals necessary to complete the work under these items as shown on the plans, as directed by the Engineer and as specified herein.

Item 998 – MISCELLANEOUS WORK ALLOWANCE (ENGINEERS DISCRETIONARY FUND)

Description

- (a) The intent of this section is not for work or materials typically incidental to other work items performed and/or rendered under this contract, or is for work and/or materials which are otherwise called for under these specifications, and/or for work which is indicated on the plans, but for work and materials which are unique in nature and rendered as a direct request of the Engineer. These items of work shall be completed only when and as directed by the Engineer. The Contractor may not proceed with any work under this section without the written notice of the Engineer to complete the work under the "Miscellaneous Work Allowance".
- (b) The sum to be allowed for the work of this **Item 998** shall be **ten thousand dollars (\$10,000.00)**.
- (c) All work under this item shall be paid for by one or more or a combination of the following methods at the City's discretion:
 - 1. Unit prices previously bid
 - 2. An agreed lump sum
 - 3. The actual cost of:
 - a. labor, including foreman;
 - b. materials entering permanently into the work;
 - c. the ownership or rental cost of construction plant and equipment during the time of use on the extra work:
 - d. power and consumable supplies for the operation of power equipment;
 - e. insurance;
 - f. social security and old age, and unemployment benefits.
- (d) To the cost under **paragraph** (c) there shall be added a fixed fee to be agreed upon, but **not to exceed fifteen per cent** (15%) of the actual cost of the work. The fee shall be compensation to cover the cost of supervision, overhead, bond, profit and any other general expense.
- (e) The City shall retain a cash credit in full or in part, in the event that the final cost of materials and/or equipment is lower than the original cash allowance provided.

(f) To the estimated cost or actual cost **under paragraph** (c) for work performed by subcontractors, there shall be added a fixed fee of ten per cent (10%) as compensation to cover the subcontractor's cost of supervision, overhead, profit and any other subcontract general expense, plus ten per cent (10%) as compensation to cover the General Contractor's cost of supervision, overhead, profit, bond, and any other general expenses.

Basis of Payment

(g) Payment for work completed under **Item 6** shall be as specified above, in full or in part, as pre-approved by the Engineer.

Item 999 – ALLOWANCE FOR PAYMENT OF POLICE OFFICERS

Description

- (a) The Contractor shall include in his bid an allowance of **five thousand dollars** (\$5,000.00) for payment of Police traffic officers. This allowance will be used as a basis for comparison of bids only.
- (a) The City will reimburse the Contractor for the full amount of charges for Police services.
- (b) Article 1 of the Special Conditions of the Contract shall apply.
- (c) Under this item the Contractor shall be responsible for ordering, and for canceling details on a day to day basis. In the event the Contractor has ordered police details, and does not give the police department ample advance notice that work has been cancelled for that day due to inclement weather or for any other reason, then the Contractor shall bear the expense of that billed detail.
- (e) The Contractor shall completely familiarize himself with the current policies regarding and/or regulating police details. In the event police detail requests cannot be completely filled to cover the Contractor's scheduled work for any particular day then the Contractor shall adjust his work schedule accordingly and shall not hold the City responsible for any loss of time, or for any other financial loss. The City of Newton will however grant an extension of time to the original contract term for each day lost due to insufficient police staffing.

Basis of Payment

- (d) Under Item 4 the Contractor shall submit paid invoices to the Engineer. The Contractor shall then be reimbursed the full invoice amount for City of Newton Police Department charges and/or, when applicable, for Massachusetts State Police charges, as full reimbursement under the allowance for payment of Police officers.
- (g)The original invoice issued by the billing authority must be submitted to the Engineer for payment under this item.

END OF SECTION

Bidders are responsible for downloading the specifications from the City's web site at www.newtonma.gov/bids.